EasyPlex

Dear Art, Thank you for the mail. Yes, we would be pleased to send you a review copy. Today is Sunday, Aug 2. We will send to your address a complimentary copy UPS Two day air.

I appreciate your willingness to remain open-minded concerning emulation. I must agree that I believe many implementations fail miserably. Not from their technical lackings, but from the perspective of general consumers.

Our product market is primarily the professional who wants to bring work home from the office. Usually, these consumers don't have the sense of humor that many "hackers' have. Instead, they expect a product to meet its claims, for their software to work "right-out-of-box", and in general , to be bug-free (i.e., a well-tested product BEFORE it gets to market -- what an idea!).

Seriously, we take the concerns of our consumers and dealers seriously, also. We are a professional, no-nonsense consulting firm. Consequently, we treat our consumers with respect. They are paying for a product.... and they deserve it. Gone are the days when you can dump a garbage program on the market and have it sell well.

In summary, we hope you put both our product, and our reputation, to the test. I think you will be pleased. You may find the product has its shortcomings, but we do not sell it as a panacea. Rather, you will find that we have the wherewithal and the guts to do it right. Thus, we follow strictly the first programming paradigm: Make it work first; then make it better, faster, and simpler. Hopefully, we will have had enough time in the market that our actions will speak louder than words. Hopefully, our past actions indicate to you and others the type of performance to expect in the future. Hopefully, you will agree.

Thank you. Let us know if we can provide any additional information or assistance. Sincerely, Bill Teal (904) 221-4149(private ph #)

A V A N T — G A R D E ' S   p c – d i t t o

Finally, IBM Emulation on Your ST

Review by Mike Gibbons

pc-ditto: It Works!

A whole new adventure has opened up for the Atari ST user with the surprisingly functional new product, *pc-ditto* by Avant-Garde Systems. Unlike previous software attempts by other companies which were less than useless, this truly incredible software emulator actually works. If you want to explore the realm of MS-DOS or bring home PC work from the office, this product fulfills these needs at an affordable price.

The included instructions, although sparse, were all I needed to get *pc-ditto* up and running. It helped that I have an IBM-compatible computer and a lot of prior MS DOS experience. The novice MS-DOS user, however, must first obtain a copy of MS or PC DOS, preferably the 3.2 version on 3.5 inch disks. Next, of course, the novice will have to learn something about the MS DOS operating system. (If you are new to MS DOS, see Wm. Price on MS-DOS elsewhere in this issue.)

The current version of *pc-ditto*, 2.0, only runs on a color ST monitor. The exterior package reads that you need a color monitor, but inside it states that monochrome is supported, a bit confusing. The current version supports both IBM color and IBM monochrome programs, but only runs on a color ST system. Avant-Garde has promised that monochrome support is number one on the list of improvements in the next version due out this fall. The upgrade to the newer version will be free to registered 2.0 owners. They decided to release only the color version because the monochrome monitor had not been fully tested and they did not want to delay the release of the product another three to six months. Since I have a color monitor, I certainly am happy with their decision to release a working color version.

Do You Need pc-ditto?

If you want the software you use at home to be compatible with (IBM) software you use at the office, you need *pc-ditto*. Some current ST products can share data between the ST and IBM. For example, in the case of *Lotus 123*, the ST product *VIP Professional* can read and write Lotus files, although there is still the problem of moving data from one disk format to another. But most ST programs are not, of course, compatible with or available on MS DOS computers.

Some Atari fans may disdain the idea of running an "obsolete" operating system like MS DOS on their STs. However, without arguing the merits or demirts of the IBM and ST worlds, let's just assume that neither machine is better but instead, that you just want to use both. When I stepped up from my IBM XT to the 1040 ST, I bought Michtron's *DOS Shell* with the ST computer. I felt that since I was familiar with the command processor, I would like to continue using DOS. What was this little thing with a tail for anyway? Well, I later found that the mouse and GEM interface were as easy to use as the command processor and in some cases preferable. Quite a statement from a die-hard IBM user.

IBM Software on Your ST

Now that you have decided to buy *pc-ditto*, you will be pleasantly surprised by the software this product runs. If you already use MS DOS, then you already know how to use this product. I have tested over 50 software packages and most of them have run without any quirks. The only drawback I encountered is that of speed. The table below provides some benchmarks to allow you to make your own decisions as to whether or not this is an issue in your mind. As many of you did, I started out with an Atari 800 and a cassette recorder. Only after I purchased my first disk drive did I realize how slow the cassette had been. I propose that an Atari user who purchases this product, without having been spoiled by a Turbo PC or XT, will find the speed acceptable. In the case of game software, however, it is quite noticeable that the emulator is slower than an actual PC. Arcade software, for the most part, runs almost too slow to be acceptable. Rather large programs may also execute slowly, but again, that is a relative thing. I used the Norton Utilities SI test which is a computing processor comparison to the IBM PC. *pc-ditto* scored 0.3, a speed of about one third that of the IBM PC. I should mention another limitation of *pc-ditto*. It only displays four colors. These colors are preselected with a setup utility on the *pc-ditto* disk and I felt no need to change from the default colors.

In testing the software, I compared *pc-ditto* running on a 1040 ST, to an IBM-compatible lap top computer (KAYPRO 2000) with a 3.5 inch drive. When I first purchased the KAYPRO, I noticed the

drives seemed to read more slowly than their 5.25 inch counterparts. I really didn't mind since I also received 720K of usable space on the 3.5 inch disk. I tested *Lotus 123* version 1A and loaded a 180K spreadsheet file on the Atari 1040 ST running *pc-ditto*. It was over 1000 rows deep and 6 columns wide. The spreadsheet worked and loaded only 30 percent slower than on my lap top computer. I quickly became excited and started porting software from my IBM-compatible desktop to the IBM lap top via a null modem cable. In the process, of course, I moved the software from 5.25 inch disks to 3.5 inch disks. I was also running *pc-ditto* on my ST and testing different packages as quickly as I could get them into the 3.5 inch format.

Comparison of Execution Speeds under MS DOS
ATARI 1040 ST vs KAYPRO 2000
(All times in seconds)

	pc-ditto	KAYPRO
Compile a 743 line basic program with the Microsoft Quick Basic Compiler......	100	18
Encrypt a file with The Confidant – A DES standard encryption utility........	167	52
Turbo Pascal – Run Window, a scrolling graphics demo to the 50 Line mark.......	36	13
Procomm Terminal Software 1200 Baud Download (21031 Bytes)............	248	206

If this product is not to be used for arcade software, what is it used for? I would suggest business, programming and other applications software not available on the ST. For starters, I can't believe how well *Turbo Pascal* runs on *pc-ditto*. I also enjoyed how some of the editors and word processors worked. *Wordstar* version 3.31 was too slow, but it also runs slowly on an IBM. *Word Perfect* worked without a hitch, both version 3.0 and the newest 4.2 version. (It should be noted that Word Perfect Corporation will soon release a GEM-based Atari ST Version of their program.) The terminal software I tested acted fine and downloads went smoothly. I prefer *Procomm* a shareware product, but other commercial terminal packages such as *SmartCom II* and *Crosstalk* worked quite well. I created pie and bar charts with a Lotus compatible MS-DOS spreadsheet named *ASEASY*. This package loaded Lotus-created worksheets easily and executed LOTUS macros flawlessly. The graphics were as good as any IBM or compatible could have done. This program was downloaded from an IBM BBS where a wealth of

other public domain software awaits a *pc-ditto* user. (Note: *Procomm* and *ASEASY* are both included in the new Current Notes PC Library introduced this month. Ed.)

Moving Software to a 3.5 Disk

If you have access to an IBM with a serial port and modem communications software, it is a relatively simple task to hook it to an ST directly to transfer software. Connect a null modem cable to your IBM or compatible and then to the ST modem port. You can take a standard RS232 cable and switch pins two and three on one of the ends of the cable to make a null modem cable. Alternatively, you can purchase a null modem cable from your dealer. Run any terminal software package on each machine and set them for a transfer rate of 9600 baud, 8 data bits, 1 stop bit and parity none. It won't do any good to go beyond 9600 baud on the IBM compatible because the serial port will not support any faster transfer rates. It is now a simple task to upload software from the compatible directly to the ST using your favorite protocol that is supported by both machines. The Atari ST can even run under GEM with a package like *ST-TERM* or *FLASH* and write directly to an ST disk. Remember this process didn't involve two modems, just a cable. Another method of transferring PC software is with a modem. Call any friend with an IBM compatible or even a PC DOS oriented BBS and just download the programs.

Under GEM, the ST can read from and write to MS DOS formatted disks. The reverse is not true and while running *pc-ditto* the computer will not be able to read a GEM-formatted diskette. For a year now I have been copying program source code from my ST to my MS DOS disks since they both have 3.5 inch drives. I have even exchanged source code between OSS *Personal Pascal* and Borland *Turbo Pascal* with almost no modifications. I simply put my 3.5 MS DOS disk in the ST and used it. As long as it had been formatted on the MS DOS lap top computer, it worked fine.

What about copy-protected software and the 5.25 inch format? Do you have to go out and buy a 5.25 disk for your ST? Since the new IBM line of computers are installed with 3.5 inch drives, most publishers are now producing software on the 3.5 inch format. They also are removing copy protection and hence removing another one of the problems. A 5.25 inch drive will cost you a couple of hundred dollars. Unless you have a specific need to have your data on 5.25 inch format, I suggest holding off buying a 5.25 inch drive. Why revert to the older, inferior disk drive technology? Besides, the new *Current*

AVANTE-GARDE'S pc-ditto

Notes PC library will carry a selection of top notch PD programs on 3.5" formats.

DOS & DITTO Survival Kit

pc-ditto emulates an IBM or IBM-compatible computer. But to use it, you must have the IBM Disk Operating System (PC or MS DOS). Where does the DOS come from? Well, you have to buy it. You will also need the DOS documentation as it doesn't come with *pc-ditto*. You should be able to get your dealer to sell you MS DOS. If the dealer can format a 3.5 inch DOS disk for you, then you are set! You get the operating system, the documentation, and with many of the MS-DOS systems, a working BASIC language and manual.

pc-ditto comes with a utility to format DOS disks called PC_DFMT.COM. I had some trouble with this format program, but if I got the message "Abort, Retry, or Ignore", I simply hit R for Retry a few times, and it worked fine. I had trouble trying to make single-sided DOS disks with the IBM DOS 3.2 format program running under *pc-ditto*. Even though I used the correct format switch, /1, it would format 40 tracks on both sides instead of 80 tracks on a single side. The program PC_DFMT.COM worked and made single-sided PC DOS Disks. Double-sided disks were never a problem on either utility. I also noticed a problem when changing from a double-sided disk in a drive to a single-sided disk. It would not recognize the drive file allocation table and sometimes I had to abort the program. To re-boot under MS DOS, you hold down the [Control], [Alt] and [Delete] keys at the same time. This brings you quickly back to the *pc-ditto* main screen before DOS was loaded.

If you are new to MS DOS, you have a whole operating system to learn, much more than could ever be covered in a magazine review. However, it might help new users a bit if I explained some of the most-used MS DOS commands.

When you load MS DOS, it looks at the BOOT disk and loads two "hidden" files. A hidden file does not appear in the listing when you ask for a directory using MS DOS. However, if you look at the MS DOS disk under GEM, these two files are not hidden (although they are set to READ ONLY). They are placed on a DOS disk when it is formatted. During the boot process, MS DOS loads these two hidden files and then looks for the program COMMAND.COM. After it loads this command processor, it looks for a file named CONFIG.SYS, and then a file named AUTOEXEC.BAT. These two files are ASCII text files you create from the console or any word processor that can save the file in an ASCII format.

For example, you might create a typical CONFIG.SYS file from the console by entering the following lines:

```
A>COPY CON:=CONFIG.SYS [RET]
DEVICE=ANSI.SYS [RET]
FILES=20 [RET]
BUFFERS=15 [RET]
[F6] [RET]
```

The [F6] key sets an end-of-file marker, closes the file and writes it to the name you indicated after the copy CON:= statement. You can also use this method to quickly make up an autoexec or any other "batch" file. So when you see documentation instructing you to add something to your CONFIG.SYS file, you can use this method. Note that you have to type the whole file in, as it does not append to the original file but overwrites it.

If a filename has one of the three extensions COM, EXE or BAT, it is executable. When you enter the filename, DOS will try to load and execute the file. Any BAT file is an ASCII text file which can be created as above and is used to execute a series of commands (for example, entering the time, date and then running your favorite program at start up). COM and EXE files are similar to PRG and TTP extensions under GEM.

To format a new disk, use the FORMAT command. For example, "A>FORMAT B:" will format the disk in drive B. However, I suggest you use the *pc-ditto* program PC_DFMT.COM and follow the prompts. What could be easier? Of course, your MS DOS disks must all be formatted before you can copy programs to them.

To list the files on your disk, enter the DIR (directory) command. If there are a lot of programs, try "DIR /P" or "DIR /W" and see what happens. It is easier to see the display with these commands than with DIR.

To copy a single file, use the COPY command: "A>COPY A:PROGRAM.EXE B:PROGRAM.EXE". If you only have one disk, MS DOS will prompt you to insert disk B into drive A as needed. Wild card characters allows you to copy several files at once. For example, "A>COPY A:*.EXE B: " will copy all files with an "EXE" extension from drive A to drive B.

To copy an entire disk, use the DISKCOPY program on your MS DOS disk: "A>DISKCOPY A: B: ". Note that you can also use ST copy programs such as *PROCOPY* to copy complete MS DOS disks, although I have had some problems with single-sided disks.

To delete a file, use the *DEL (delete)* command: "A>DEL A:FILENAME.XXX" (any filename with its extension). Be sure to be careful using

wild cards or you can easily trash a disk. DOS will ask you if you are sure if you use a *.* wild card. You had better be sure or say good bye to all you files on that disk.

To view an ASCII file, use the TYPE command: "A>TYPE A:FILENAME.XXX". This will show the file on the screen. If is is long you can stop and start the file from scrolling with a [Control]+S toggle. You can use MS DOS to redirect the output from the screen to the printer by entering: "A>TYPE FILE.TXT >PRN". This lets you send an ASCII text file to the printer. Be careful in that if you try to send a file created with a word processor or an executable program, you may get garbage sent to the printer. I once unknowingly sent a file full of formfeeds to my printer and left my printer unattended. I found a nice pile of paper on the floor.

To MaKe a DIRectory, use the MD or MKDIR command: "A>MKDIR dirname". This creates a directory, "dirname", which is the same as a folder in GEM. Use up to eight characters to name your directory. To MOVE to a directory, just type "A>CD dirname". (CD is short for Change Directory.) This will place you down into the subdirectory or folder. Subdirectories can continue downward, but it is best to keep it simple and limit your subdirectories to only one or two levels deep. To get back to the topmost directory, called the ROOT directory, type: "CD\". This returns you up to the top directory much quicker than in GEM.

To remove a directory, first delete all the files in it, then move to the parent directory (the command "A>CD .." will move you to the parent directory of whatever directory you are in) and type RD or RMDIR (for ReMove DIRectory) and the directory name.

That's All or Is It?

This new adventure I promised you is just beginning. If you really want to have some fun, just invite that die-hard IBM neighbor over and boot up *Turbo Pascal* for him. I have been waiting a long time for a product like this, and based on this initial offering, I have every confidence in AVANT-GARDE SYSTEMS. GINNY and BILL TEAL run this small, Florida based company and I am sure they will continue to improve our ST libraries with quality products like *pc-ditto*.

[pc-ditto, AVANT-GARDE SYSTEMS, 381 Pablo Point Drive, Jacksonville, Florida 32225. (904) 221-2904.]

MS-DOS ON THE ST: Part I
(Continued from Page 49)

Exit PC emulation and boot your *pc-ditto* disk. From the directory, drag the two files PC_DFMT.PRG and PC_DDRVR.SYS over to your newly DOS formatted disk. This procedure may sound strange, but as both Avant Garde and David Small have previously pointed out, the ST and IBM formats are virtually identical. More on this later. Back to *pc-ditto* emulation. Boot your DOS disk containing the two transferred programs. Now you must configure the system by entering the following:

    COPY CON CONFIG.SYS
    DEVICE=PC_DDRVR.SYS

To execute this configuration, reboot the disk and enter: "ASSIGN A=C,B=D". Without the assign command, the special features of PC_DFMT will not be available. If you want to increase your techno-stress, enter this command with a space after the comma, or omit the comma and use a space only. Also, don't use ASSIGN on your standard DOS disk. It kills execution of the regular FORMAT command. DOS will not format an assigned drive.

To use these special *pc-ditto* utilities, after the A> prompt, enter PC_DFMT. This will present a menu screen where the UP and DOWN cursors move between menu items, and the LEFT and RIGHT toggle selections in each item. For those that have High Density support with DOS 3.2 or 3.3, these utilities will be of little value. But for those with single sided drives, this is your only hope. Identify your target drive as A or B (not C or D), and select 80 tracks, 9 sectors, 1 side. You may also elect to copy DOS to the disk you are formatting. Then press F5 to execute. Sometimes DOS gets cranky and doesn't recognize the drive. Just keep pressing an R for Retry and it will eventually execute. H when completed, it may not return to DOS; so a "warm boot" will be needed. When formatting multiple disks, you may get "Fatal stack error". This one is indeed fatal, and a reboot from *pc-ditto* will be required. However, the above ASSIGN format should not produce this problem. The formatted disk will contain 362,496 bytes. With DOS 3.2 copied, it will leave 292,864 available -- the same as for a standard double sided 40 track disk. PC_DDRVR.SYS allows you to use this nonstandard single sided 80 track disk. Avant Garde has been sensitive to the needs of users with SS drives and has provided a solution that works. You're in business.

AN INTERVIEW WITH BILL TEAL
Most Frequently Asked Questions About pc-ditto

[In preparing for a recent CompuServe online conference, Bill Teal, author of pc-ditto, compiled a list of answers to his most-often asked questions. Unfortunately, not many of the questions surfaced during that conference. However, I assured Bill that CN readers would certainly be interested in those answers. So, presented below, is a CN exclusive interview with Bill Teal. — Joe Waters]

Where can I get pc-ditto and how much does it cost?

pc-ditto is sold thru Atari dealers. The suggested retail price is $89.95.

Why can't I buy pc-ditto through mail-order?

We sell thru dealers because most provide a better service and value than other market mechanisms, such as mail order or direct mail:

1. The consumer can try before buying. (Some dealers even go as far as letting the consumer try his own software).

2. Most dealers have used the product and can answer questions and offer advice.

3. Many dealers offer assistance with transfering files on 5.25-inch media to 3.5-inch disks, or even rent 5.25-inch drives for overnight use.

4. Some dealers are the source for the other items the consumer will need, such as the DOS, the disk drives, IBM applications software, and even supplies.

5. And, we have found that many dealers provide competitive prices, some to users groups, or as part of a bundled machine sale.

6. Finally, many dealers offer technical service after the sale, to help with any problems the consumer encounters. To bolster this service, Avant-Garde provides support services to dealers, to make their task easier.

What kind of support can dealers expect?

Primary support service to our dealers is free technical advice over the phone. We also produce a newsletter that covers information of interest to dealers. (This may seem like very little, but in the computer industry as a whole, technical support (also, known as maintenance) represents about 80 percent of the consulting practice hours today; and, it is the most expensive service to provide). This is a hidden service; one that the consumer doesn't even see. Yet, without it, many companies never succeed, because their dealers don't succeed. And, why should they? Without some incentives such as manufacturer's support, the cost of the product increases because they (the dealer) have to provide all the support. And, sometimes, with a product like ours, that is nearly impossible.

Also, we are working on newer brochures, and other marketing materials for the dealer. (Please remember, since we're just starting up, these things take time ... and Money).

And, of course, we have advertising in place which will be published this fall, targeted at the consumer. Concurrently, we have product reviews which should arrive at about the same time (if this works according to plan).

What's the Norton compatibility of pc-ditto?

The Norton SI (compatibility, as called by some) is 0.3. That means the processing speed of pc-ditto, according to Norton, is about 30 percent of an IBM PC. (.3 x 4.77 MHz = 1.43 MHz approximately).

Although, any yardstick for measurement is usually better than none, the SI is not strictly indicative of the actual performance of pc-ditto for all applications.

We measured pc-ditto effective speed using a wall clock. We broke applications into various categories, selected what we felt were the most popular applications to represent that category, ran each application several times to get an average, tested memory-intensive and disk I/O intensive speeds (when we could separate them), and summarized the results.

This measurement technique is known as throughput measurement. It measures the overall processing performed in a period of time. Although we could try to measure MIPS, effective MHz, additions per second, and so on, this was the best measurement suited for the general consumer. This was a

measurement which best reflected his perception of the speed of *pc-ditto*.

What this measurement says is that throughput depends on the application. A word processor may run just as quickly on *pc-ditto* as on a 25MHz 80386 IDS, such as *WordPerfect* and *pfs: Professional Write*. Reason: most of the time, the application is waiting on the user keyboard input. This is true of many applications. On the other hand, some applications which require significant processing before results are rendered, say a statistical analysis using mathematical optimization, will be much slower on *pc-ditto* than on even a stock IBM PC.

Therefore, the speed translates into usefulness of *pc-ditto*, or any "hardware processor"; it just depends on the application. For example, in our own case, we get many calls about using IBM games on *pc-ditto*. We always state that we do not feel that games work best on the product. Some seem to be fine, but others are very sluggish, and consequently, in our opinion, not useful. Most games require lots of processing and intensive graphics. We only have games on the product list, because many business users feel more confident about *pc-ditto* compatibility, if one of the defacto standards of compatibility, such as Microsoft's *Flight Simulator*, at least runs.

Are you finished now that pc-ditto is out?

Absolutely not! The first rule in commercial software development is to get it right. Then, make it faster. We're doing just that. We might have been able to sell you a much faster, but less reliable product. It would only get you to the crash point faster. But, that would be useless. We would rather gain your confidence in our product. Then, improve it; in all areas.

How do I attach a 5.25-inch drive to my ST?

Attaching a 5.25-inch drive to the Atari is a "toughy" question. We are not hardware engineers. What we do know is that the drives which connect to the ST are off-the-shelf IBM compatible drive mechanisms, available from almost any reliable source. The same goes for the drive power supply. The problem that arises most often is finding a cable to connect the drive to the ST. Generally, this is a 34-pin edge connector on one end, with a 15-pin DIN connector on the other. We don't build our own drives. Thus, we are not sure how to overcome this cable problem. We purchase our drives thru I.B. Computers, located in Portland, Oregan. They sell a half-height drive with cable, ready-to-go. To date, its the only one we've tested.

We tell anyone who asks, that if they already have another drive, then *pc-ditto* should work fine with it, as long as the ST can "talk" to it — as long as the electrical connections are sound.

How do I get IBM programs for my ST?

Commercial IBM applications come on 5.25-inch disks. Today, many more are being provided on 3.5-inch media, as well. Some companies have a product upgrade policy, such as Ashton-Tate, whereupon, you return your master disk, or some other product registration, and they will send you a 3.5-inch version.

Also, applications can be simply copied from 5.25-inch media to 3.5-inch, as long as its not copy-protected. This means you must have use of a 5.25-inch drive on the ST, or use another computer with both 5.25-inch and 3.5-inch drives. (You can modem across the software between two computers, but this is messy, and recommended for the advanced users with all the tools (including a modem program on the Atari)).

I can't get my mouse to work. What's wrong?

Any product which requires the mouse, such as *AUTOCAD* and *PC Paintbrush*, will not currently work. Mouse support will be out this fall.

What is your upgrade policy?

The first upgrade is free to current owners of *pc-ditto*. What we will do for later updates, if you feel they will be necessary because we don't get this one right, is unknown. I do know that we are against selling bugs. If we believed consumers should buy bugs, we would have built some in, then put out specific add-on fixes, for a price, maybe even marketed them as new modules. That stinks.

We believe, instead, that a product should be somewhat like a car (NOTE: I didn't say exactly like a car, with the lemon scent). When you buy it, with whatever features it has, those features should work. Period. If they don't, then take it back to the service dept and make 'em fix it until it does. Those features may not be the best in the world, but whatever they are, they should work. (We also feel the buyer be aware, in any market...that's why we want you to support your local dealer; so, you can test *pc-ditto* before you buy).

In short, we correct bugs we know of with field patches. These patches are designed to get it working. They are usually sent to owners who contact us directly about a problem, to all dealers, and if possible, uploaded on national

boards, such as these (as long as our copyright is maintained). For example, we have a field patch being prepared right now for release in the next couple of weeks.

Updates, on the other hand, are enhancements. Not bug fixes. We think you should get it working first, then add features.

By the way, let us hear from you. One reason for the "free" part of the update, is to "entice" you to respond to us: Let us know what kind of enhancements that would make your product, *pc-ditto*, more useful to you. No matter how strange the request. You may find out that your "impossible" is indeed very possible. We can't guarantee that every idea can or will be implemented. Rather, we rank the requests by percentage requesting, maybe add a few of our own, and check the feasibility of the rest. If some idea is impossible to us, we'll also tell you, and why. Hopefully, this is fair. Its your money. We've built the cost of the update into the price. We'd like to hear from you.

Where can I get the MS-DOS operating system?

Where to get the MS-DOS is our most difficult question. First, stick with the DOS makers we recommend. Some DOS's have problems. They don't just fail on *pc-ditto*, but they fail on a stock PC XT as well. Second, check your dealer. He may have the DOS, or be able to supply one from a distributor.

What are your customer support policies?

Our customer support policies are:

1. You may call or write to us, if you have returned your registration card. (We will check our files, before providing any technical answers. If you have a general question, or just want to notify us of a bug or enhancement vote, we'll talk). This is primarily because of the piracy, even thought its not fool proof.

2. Current owners will receive a free update this fall. You need not call or write. Just send in your card, and the update will come automatically.

3. Bug fixes, via patch, will be released as they arise. Again, only registered users who have contacted us about the problem will receive notice. (Dealers and possibly national networks will also have the patches).

Your phone lines are ALWAYS busy. How can I get through?

Our phone lines are very busy. We apologize. We have installed more. Our hours are: Monday through Friday, 10:30 AM to 6:30 PM EST. Most of the calls come around 1 PM to 3 PM (when the West coast wakes up?). So, if you can avoid those hours, you will have more success.

What sort of Turbo or speed-up options are compatible with pc-ditto?

We are not familiar with most of the "Turbo" or speed up options. We have been told about disk caches and screen drivers, but we are concentrating on speeding up the underlying emulation process, rather than the superficial application mods that some of these perform (We do know that some of these things are quite effective, however, and are glad they exist. But, the market is too fast-changing for us to test all of them, as well as test the larger market-share items, as *Framework II 1.1*, etc.) We hope you understand.

That's one reason we support the national networks. These systems allow the word to be spread quickly concerning such utilities, rather than waiting on Avant-Garde to announce them.

pc-ditto works fine on a color monitor, but fails on mono. Is this a bug?

Atari monochrome monitor support will be out this fall. We did not release it sooner because it was not tested. When we talked to Atari in New York during a March show, they recommended going with the color monitor first because the sales of those monitors were about 80 percent of U.S. monitor sales. With limited time and resources, we had to choose between hard disk support and the mono monitor. We've even heard from reviewers of some big-name publications. One said we made the right call. Everyone in the U.S. screams "color,color,color." If we had gone the mono route first, most would say we couldn't do color. But, by doing color first, most think mono is easy. Oh well. Good or bad, the issue is moot.

A T A R I F E S T
1 9 8 7

Coming

Saturday, October 24
Sunday, October 25

Fairfax High School

FAIRFAX, VIRGINIA

MS-DOS ON THE ST: PART I

Cultural Shock for GEM Fans

By William Price

For those who have never used CP/M or MS DOS, the new IBM PC emulation facilities provided by *pc-ditto* are akin to cultural shock.

True, it does not support the mouse; so there's none of this laid back clicking on icons that characterizes the ease of use provided by Digital Research's GEM interface on the ST. But in the future, the mouse will be supported so that you can use the full features of GEM PC and Microsoft Windows. For now, it's keying commands and making all the syntax and typo errors that are the hallmark of a hunt-and-peck typist like myself. Frustrating is one reaction, but another view will recognize the power, versatility, and flexibility provided by a command language. GEM, despite its ease of use and convenience, does have its limitations.

Bill Teal, the developer of *pc-ditto*, is an ex-IBMer from the D.C. area. He has done a remarkable job in delivering a software emulator for the Intel chip. Hardware co-processing, ala the ATR 8000, is much easier to accomplish as well as more expensive. Developing a software emulator that performs like this one requires some real smarts. And you haven't seen all of them that Bill has. Apparently, he has a bundle of tricks up his sleeve that will raise a lot of eyebrows. So go all out to support this unprotected system. Else the effort will not be worth his time and we will not benefit from his clever innovations. If you like *pc-ditto* and don't own it yet, go out now and buy it! More goodies are on the way for its owners.

For those that have been initiated to MS DOS through the facilities of *pc-ditto*, I'll try to give some tips on how to get the most out of MS DOS on your ST. Mike Gibbons, elsewhere in the issue, will tune you to how and what *pc-ditto* can do. Putting aside the slowness of operation that is a consequence of emulation (and this will change), the ST offers several significant improvements over the IBM PC XT. First is the higher capacity 3.5" double sided disk drive that doubles the storage available on IBM's 5.25" drive. Second is RAM expandibility beyond the 640K offered on the PC. This and the disk capacity are severe limitations to running large systems like PageMaker and Ventura Publisher on the PC. The ST provides a better vehicle for operating both of these systems. Third is the ST's color monitor which is sharper and crisper than the standard IBM color monitor. And of course there is the difference in price. After

running a few PC applications on your ST, it will really make you appreciate -- even be ecstatic -- about the architecture of the ST and what GEM really does for you. Now, let's get on with setting up MS DOS.

Discovery -- 3.5" Disks. MS DOS 3.2 was the first version to support 3.5" drives. These drives have only been recently discovered by IBM and are defined as High Density. The older 5.25" drives, standard on PCs until the advent of the PS/2 series, had a maximum capacity of 360K from 40 tracks, 9 sectors each, double sided format. With 3.5" disks, the maximum capacity is 720+ with 80 tracks, 9 sectors, double sided. IBM also provides a 3.5" Quad Density floppy drive with 1.2 megabyte capacity. A similar drive will soon be available for the ST from Diverse Data Products in Miami. Their drive is currently running with 1.4 Meg capacity, and sometime in the Fall, they hope to have a 2 Meg unit running with utilities developed by David Beckemeyer of *Micro-C Shell* fame.

DOS 3.2 & High Density Disks. Although MS DOS 3.2 can handle the 730K density, it must be configured for this format since the default is still 40 tracks for the 5.25" floppy. To do this, a CONFIG.SYS file must be created on your DOS 3.2 disk. When booted, DOS first looks for the presence of this file and tailors the system according to the parameters that are specified. To set up the High Density configuration, with DOS 3.2 in Drive A, type the following at the A> prompt (which is shown in the example). Commands are not case sensitive, so upper or lower case will do.

```
A> COPY CON CONFIG.SYS
DEVICE=DRIVER.SYS
DRIVPARM=/D:0 /F:2
DEVICE=DRIVER.SYS
DRIVPARM=/D:1 /F:2
[F6]
```

The COPY command creates a file called called CONFIG.SYS and then copies the ASCII text you enter on the CON(sole) -- your keyboard -- to this file. DEVICE= equates the disk drive to the utilities provided by DRIVER.SYS. The drive parameters are then defined for D:0 (Drive A) and in the last line to D:1 (Drive B). The F:2 parameter defines the format of these drives as High Density or 730K (80 rather than the default 40 tracks). The above format, punctuation and spacing is correct. There are no spaces before

or after the equal signs. But a space before the /F:2 switch is essential. There must be no spaces between the statement and the [Return] key entry. The last line must be closed with the [F6] or Function Key 6. This generates a Control Z [^Z], an End-of-File marker, executes the COPY command, and writes the file. As you are working with copying to CONFIG.SYS, you will discover that each time this is done, it overwrites the previous file -- it does not add to that file. Whatever you type must be the entire configuration set.

You can examine this file by typing the following at the A> prompt:

COPY CONFIG.SYS CON

This command copies the contents of the file (any ASCII file) to the CON(sole) which in this syntax position is the monitor. When CON is the subject, it's the keyboard. As an object, it's the monitor. PRN can be used in lieu of con to direct the file to your printer. But make sure it is on-line first. Sometimes DOS gets nasty with errors and may require rebooting the system. You can also use SHIFT * print text. This is an ASCII character print and not a graphic screen dump. Using CTL *[RET] will toggle the printer on and off. The asterisk must be the one to the far right of the keyboard over the numeric keypad. You may also use PRINT filename.ext PRN to direct a text file to the printer. Using TYPE filename.ext will display text in that file to the screen. In these examples, the file must be on the drive indicated by the prompt, otherwise the drive letter must be entered before the filename.

These newly created CONFIG.SYS parameters must be installed by the system, so simultaneously press CTL ALT and DEL to quit DOS. This returns you to the *pc-ditto* start-up screen where you press RET to re-boot DOS. Two messages should appear after boot-up to indicate that High Density drives C and D have been installed. C is Drive A, and D is B. DOS makes this equation and you continue to specify A and B in your commands. If you have a hard disk, identify it as E.

Formatting and Copying. With the system now configured, the FORMAT command will default to 80 tracks and 730K. This can't be used to format a 5.25" drive. (If this is a constant requirement, use only the first set of DEVICE= and DRIVPARM= statements for the CONFIG.SYS file.) If FORMAT B:/S is used, the 3.5" disk in Drive B will be formatted and the hidden DOS files in Drive A will be copied to the disk to make it bootable. The system takes over 64K of the available disk space. FORMAT alone will generate a disk with 730,112 byte capacity. The COPY command can be used to copy files to the new formatted disk. For example, COPY A:*.* B: will copy "all" files

from Drive A to B, but not quite all. This command will not copy hidden files or sub-directories. Since two of the critical system files are hidden, they can only be copied with the /S switch on FORMAT or with the DISKCOPY command. Both also copy sub-directories, or in ST parlance, folders. The DOS 3.2/3.3 XCOPY command will also copy folders, but not hidden files.

At this point, let me apologize to some for being so pedantic. This detail is provided in the pages of Current Notes for two reasons. First, the Avant Garde instructions are not clear in some instances, and there are a few minor errors in the examples. It took me several hours by trial and error, and reading three DOS books to finally succeed with this configuration file. Secondly, I've been on the phone with four different perplexed STers walking through this sequence. If nothing else, this should help a few that are struggling and save a lot of time on the phone.

Single-Side 3.5" Drives. What if you have single side 3.5" drives? DOS only supports 40 tracks on a single side drive. It cannot format or read 80 tracks from this type of device. I recommend that financial priorities be adjusted to purchase double side drives or possibly try upgrading your drive by swapping out the SS mechanism for DS one. This can be done with the ST Epson drives -- the ones with an eject button on the lower right. However, this may not work with the Chinon or other type drives with the eject "tongue" under the disk slot. This style faceplate may prevent insertion of another drive mechanism. But do call some of the advertisers in Computer Shopper and other ST magazines to inquire. If double sided drives are a long shot, Avant Garde has provided a solution. Here's how to do it using *pc-ditto* utilities.

First you must make a single sided 40 track 3.5" disk which includes DOS. One method is to use a 5.25" 360K DOS disk to perform this function. To do this, go to the *pc-ditto* menu and define Drive A as EXTERNAL and then define the external drive as as 5.25". Your 3.5" drive will automatically default to Drive B. Booting DOS from the the 5.25" drive, format Drive B with the following command:

FORMAT B:/1/S

The /1 defines single side, and as you recall, /S copies the DOS system files to the formatted 3.5" disk. You will now have a disk with a capacity of 179,712 bytes. However, DOS 3.2 will take approximately 69K leaving 110,592 available on the disk.

wild cards or you can easily trash a disk. DOS will ask you if you are sure if you use a *.* wild card. You had better be sure or say good bye to all you files on that disk.

To view an ASCII file, use the TYPE command: "A>TYPE A:FILENAME.XXX". This will show the file on the screen. If is is long you can stop and start the file from scrolling with a [Control]+S toggle. You can use MS DOS to redirect the output from the screen to the printer by entering: "A>TYPE FILE.TXT >PRN". This lets you send an ASCII text file to the printer. Be careful in that if you try to send a file created with a word processor or an executable program, you may get garbage sent to the printer. I once unknowingly sent a file full of formfeeds to my printer and left my printer unattended. I found a nice pile of paper on the floor.

To MaKe a DIRectory, use the MD or MKDIR command: "A>MKDIR dirname". This creates a directory, "dirname", which is the same as a folder in GEM. Use up to eight characters to name your directory. To MOVE to a directory, just type "A>CD dirname". (CD is short for Change Directory.) This will place you down into the subdirectory or folder. Subdirectories can continue downward, but it is best to keep it simple and limit your subdirectories to only one or two levels deep. To get back to the topmost directory, called the ROOT directory, type: "CD\". This returns you up to the top directory much quicker than in GEM.

To remove a directory, first delete all the files in it, then move to the parent directory (the command "A>CD .." will move you to the parent directory of whatever directory you are in) and type RD or RMDIR (for ReMove DIRectory) and the directory name.

That's All or Is It?

This new adventure I promised you is just beginning. If you really want to have some fun, just invite that die-hard IBM neighbor over and boot up *Turbo Pascal* for him. I have been waiting a long time for a product like this, and based on this initial offering, I have every confidence in AVANT-GARDE SYSTEMS. GINNY and BILL TEAL run this small, Florida based company and I am sure they will continue to improve our ST libraries with quality products like *pc-ditto*.

[pc-ditto, AVANT-GARDE SYSTEMS, 381 Pablo Point Drive, Jacksonville, Florida 32225. (904) 221-2904.]

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Exit PC emulation and boot your *pc-ditto* disk. From the directory, drag the two files PC_DFMT.PRG and PC_DDRVR.SYS over to your newly DOS formatted disk. This procedure may sound strange, but as both Avant Garde and David Small have previously pointed out, the ST and IBM formats are virtually identical. More on this later. Back to *pc-ditto* emulation. Boot your DOS disk containing the two transferred programs. Now you must configure the system by entering the following:

```
COPY CON CONFIG.SYS
DEVICE=PC_DDRVR.SYS
```

To execute this configuration, reboot the disk and enter: "ASSIGN A=C,B=D". Without the assign command, the special features of PC_DFMT will not be available. If you want to increase your techno-stress, enter this command with a space after the comma, or omit the comma and use a space only. Also, don't use ASSIGN on your standard DOS disk. It kills execution of the regular FORMAT command. DOS will not format an assigned drive.

To use these special *pc-ditto* utilities, after the A> prompt, enter PC_DFMT. This will present a menu screen where the UP and DOWN cursors move between menu items, and the LEFT and RIGHT toggle selections in each item. For those that have High Density support with DOS 3.2 or 3.3, these utilities will be of little value. But for those with single sided drives, this is your only hope. Identify your target drive as A or B (not C or D), and select 80 tracks, 9 sectors, 1 side. You may also elect to copy DOS to the disk you are formatting. Then press F5 to execute. Sometimes DOS gets cranky and doesn't recognize the drive. Just keep pressing an R for Retry and it will eventually execute. H when completed, it may not return to DOS; so a "warm boot" will be needed. When formatting multiple disks, you may get "Fatal stack error". This one is indeed fatal, and a reboot from *pc-ditto* will be required. However, the above ASSIGN format should not produce this problem. The formatted disk will contain 362,496 bytes. With DOS 3.2 copied, it will leave 292,864 available -- the same as for a standard double sided 40 track disk. PC_DDRVR.SYS allows you to use this nonstandard single sided 80 track disk. Avant Garde has been sensitive to the needs of users with SS drives and has provided a solution that works. You're in business.

README.1ST   June 1, 1987

List of files and folders on pc-ditto master disk:

        README.1ST
        CERTPGMS.DOC
        \STPROGRAMS
            PC-DMENU.PRG
            PC-DITTO.PRG
            PC-D.1
        \PCPROGRAMS
            PC-DFMT.EXE
            PC-DDRVR.SYS
            SPEEDY3.EXE
            QWICKEYS.COM

1.   README.1ST   This file: contains information regarding the files on   your disk, lat
updates to those files, and a summary of   general problems and solutions which have be
encountered by   users.

2.   CERTPGMS.DOC   Contains a list of software certified (i.e., tested   fully) on pc-ditto.

3.   \STPROGRAMS   Folder containing files which run under the Atari   GEMDOS. These fil
should be copied to an Atari format disk   (see your User manual for details).

4.   PC-DMENU.PRG   This program allows you to change the characteristics   of pc-ditto to yo
taste. Such parameters as colors used by the   monochrome and graphics palettes, disk dri
assignments, and   others. This program is menu driven, with built-in help. Your   user manual al
explains how to get started. This program   should be run first, before pc-ditto, to ensure t
configuration   of pc-ditto is correct for your usage.

5.   PC-DITTO.PRG   This is the main program. Clicking this program will   start the IB
compatible emulation using the preferences selected   in the pc-dmenu program above.

6.   PC-D.1   This is part of the pc-ditto.prg main program. It must also   be contained on the sa
disk as pc-ditto.prg for it to work   correctly.

7.   \PCPROGRAMS   This is a folder containing IBM-type programs. These   files should
copied to an IBM format diskette. They only run   under PC or MS-DOS. Again, see your us
manual for more   information concerning the copying and setup of these programs.

8.   PC-DFMT.EXE   This program will format 80-track high-capacity 3.5"   disks under D
versions below 3.2. It will also perform regular   formatting, similar to the FORMAT utility progra
This program   is menu-driven with built-in help. Please see the user manual   for addition
information on the creation and use of high-   capacity 3.5" disks, as well as some of the problem a
solutions   below.

    By the way, since DOS versions below 3.2 do not recognize a high-   capacity disk (720
without a device driver, DOS versions below   3.2 cannot be installed on a high-capacity disk (t
device   driver is not present when DOS first starts up).

    For single-sided disk owners, this program can create 80-track   format disks, providing 360,0

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characters (360K) of storage.

9. PC-DDRVR.SYS   This is a DOS device driver used to access high- capacity (720K) diskett using DOS versions below 3.2. It can also be used to read and write Atari GEMDOS format dis for those DOS versions that may have trouble doing so, otherwise. See your user manual for an i depth discussion of high-capacity disks and use of this driver under your DOS.

--------------------Provided at no charge----------------------------

10. SPEEDY3.EXE   A public-domain program which may be useful from time- to-time speedup the screen display of some DOS versions; primarily DOS versions below 3.0. Testing of t program has been limited. Therefore, try running it after you start your DOS and before you r any applications. For many applications (e.g. dBase series), it does speed screen displays around 30 faster. Other applications, such as Lotus 1-2-3, there appears to be no effect. Because of t public domain nature of this program, it should be tested with your applications to determine if has any real value. Also, if you should encounter any flakyness using it, please let us know. date, we have not encountered any problems, but the possibly always exists with any product.

11. QWICKEYS.COM   This program, like Speedy3.exe, is public domain. It will often spe cursor and repeat key use. Again, as with Speedy3.exe, please try it with your application determine if any real enhancement is perceived.

HARD DISK USERS -- PLEASE READ -- VERY IMPORTANT INFORMATION
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1. pc-ditto currently supports only one physical hard drive (logical unit number 0). More driv may be supported in the future.

2. To access the hard disk, you MUST use DOS version 3.0 or higher. Versions of DOS below 3 can not access your hard disk, and if used to write to the hard disk, WILL destroy information even make the hard disk unusable until re-formatted.

3. Formatting the entire physical hard disk requires you use the proper Atari GEMDOS hard di utility. Once formatted, DOS can then format individual partitions for its use, if you need.

It is not necessary to format a partition with DOS FORMAT, unless you wish to install DOS that partition.

***** WARNING: DOS can not access any partition on a hard disk with less than 4.2 Meg (4,206,0 characters)!!! To do so WILL mean disaster to files in that partition. (Sorry, but this is a D requirement we can not get around --- and, we have tried!)

Also, not that this will occur often, but DOS can not access partitions with more than 32M sizes.

4. DOS may be installed on your hard disk for autoboot using the DOS FORMAT, SYS, a SELECT utilities. FDISK may be used to inspect the partition information, but it is not allowed actually update that information.

5. If you have only one partition on your hard disk, only one operating system may be installed it to AUTOBOOT. That is, if you can automatically start GEMDOS from your hard disk, you cann install DOS on that same partition to automatically start. So, you may have one or the other; not both

6. Multiple partitions are supported. Under GEMDOS, each partition is assigned a drive lett

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IBM XT hard drives may have more than one partition, but only one is active for use by DOS (t others are considered to have different operating systems, and thus are inaccessable to DOS).

We provide a solution to this problem by treating multiple partitions the same way as GEMD does: assign a drive letter to each partition. For DOS, this means each partition is treated as being separate, physical drive with only one partition.

7. If you format a partition, whether you install DOS or not, we will recognize that partition potentially bootable. As such, DOS can only be booted from the first hard drive in a system (dri C:).

This means, if you do not format the first partition on your hard drive, but do format the secon third, or fourth, then we must treat that partition as letter C:. The remaining partitions a sequentially lettered for D:, E:, and F: (if used). The letters are assigned in a circular fashion. S after the last partition has been assigned a letter, the first partitions are assigned the next letters.

If DOS is to be booted, it must reside on the FIRST DOS bootable partition in the group. other words, if partitions 1 and 3 are formatted as DOS drives, and partitions 0 and 2 are GEMD DOS will be bootable only from partition 1.

The following table will hopefully summarize this mess:

Bootable DOS partition Partition assigned to drive
---------------------- ---------------------------

if you have four partitions	C:	D:	E:	F:
	--	--	--	--
0	0	1	2	3
1	1	2	3	0
2	2	3	0	1
3	3	0	1	2

if you have three partitions			
0	0	1	2
1	1	2	0
2	2	0	1

if you have two partitions		
0	0	1
1	1	0

We use this method, because many will set up the hard disk to autoboot GEMDOS. GE autoboot requires partition 0; leaving partitions 1, 2, and 3.

This is not ideal -- because now the partition drive letters are not the same under both DOS a GEMDOS.

But, you can use the ASSIGN command under DOS and other DOS utilities to rearrange dri letters provided to partitions. (This is an advanced topic. So, we leave investigating this alternati to advanced DOS users). For most of us, we prefer to keep it simple and just keep a list of t partitions assigned GEMDOS versus DOS.

NOTE: Again, this only applies when you format a partition under DOS. If you do not for any partitions, then the drive letters will be the same under both systems.

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8. When using DOS and you do the first DIR on a hard disk letter, after the list of programs, t DOS will provide you with free space. This may take a few seconds, as the DOS will read areas the disk to determine the remaining space left. This will occur only on the first time. Thereaft DOS keeps up with the free space.

9. We recommend using the BUFFERS=16 option in the CONFIG.SYS file on your DOS start drive. (See your DOS reference guide for details). This can speed up hard disk operatio significantly.

10. DOS utility CHKDSK will report "Probable non-DOS disk. Continue (Y/N)" on hard di partitions not formatted by DOS. Answer, Y. They are correct, but this is normal, even for so IBM compatible add-on hard drives.

11. Use caution, when installing some copy-protected software on a hard drive. Some software us all kinds of information about its location on the hard drive to see if it has been copied (relocation). Consequently, it will fail to work if your backup and restores do strange things to di formats, partition sizes, and so on. There are no hard and fast rules here. Just use caution; t same applies to IBM and compatible hard drive users, anyway.

12. pc-ditto has only been tested with a single SUPRA 3.5" 20MEG drive. We will test addition drives, as we can obtain them, or as you come across new controller/drive combinations. Please c if you have problems. (Thanks).

13. If you format a partition, but do not install DOS on it, and then try to boot it, you will recei "Non-system disk" message. Just press a key and start the DOS from a floppy. See the informati above, if you have formatted more than one partition with DOS FORMAT.

STARTING DOS FROM A HARD DISK

Once you have installed DOS on your hard disk, pc-ditto will boot it:

1. First, pc-ditto will try to boot drive A:, just in case you wish to override the DOS on the Ha disk.

2. If there is no floppy disk present, then booting from the hard disk is tried.

3. Finally, if there is no bootable partition, pc-ditto will ask for a disk in drive A:, or you m ESCape back to GEMDOS.

If you should leave a GEM disk in a drive, pc-ditto will report an error and ask you to inser DOS disk or return to GEMDOS.

PROBLEMS AND SOLUTIONS GENERALLY ENCOUNTERED

PROBLEM: Because IBM compatible 3.5" diskettes are double-sided, IBM compatible 3.5" softwa can not be used in an Atari single-sided drive (SF 354 or equivalent.)

(This generally applies to Atari 520 ST owners; 1040 ST machines contain one built-double-sided drive.)

SOLUTION: 1. Purchase a double-sided 3.5" drive (recommended because this format is the wa of the future and single-sided will become more rare), OR

2. Copy your PC-DOS and IBM compatible programs to single-sided, 3.5" disks. (NOT

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some copy-protected software will not copy; thus you're left with solution #1 above).

Generally, you may receive assistance with transfering your software to single-sid disks from local Atari user groups or your local Atari dealer.

PROBLEM: Your software is on 3.5" single-sided disks. You want to use it on an IBM compatib with double-sided 3.5" drives.

SOLUTION: 1. Your disks may be read/written by any Atari ST with single- or double-sided 3. drives.

For IBM and compatibles, with 3.5" drives, the disks are usable only in the 40-tra format. This is done by using the FORMAT program, (under DOS 3.2 and above, do n use DRIVEPARM or DRIVER.SYS). Single-sided disks formatted with 40 tracks conta approximately 180,000 characters (180K). Double-sided disks formatted with 40 trac contain approximately 360,000 characters (360K).

2. If you are not technically experienced and can not obtain technical assistance, recommend you purchase a double-sided drive. The cost of the drive will most likely worth avoiding the technical frustrations you will encounter.

3. However, if you are technically experienced or fearless and brave, the following explai the procedure for creating a 3.5" disk readable by both the Atari ST and IBM compatible.

    A. To format a 3.5" disk for single-sided, 40-
        track operation under DOS using

        FORMAT x:/1

        where x is the letter of the drive
        containing the 3.5" disk.

        Then, use the disk as you would any other,
        except for the much limited space. This means
        you may copy files to and from it, as well as
        read and write it on an IBM or compatible.

    B. To format a 3.5" disk for double-sided, 40-
        track operation under DOS using

        FORMAT x:

        where x is the letter of the drive
        containing the 3.5" disk.

        Then, use the disk as you would any other,
        except for the much limited space. This means
        you may copy files to and from it, as well as
        read and write it on an IBM or compatible.

PROBLEM: You have a 5.25" disk drive and a 3.5" disk drive attached to my Atari ST. You ha selected drive A: to be the 3.5" drive. But, my copy-protected software on 5.25" disk do not start.

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SOLUTION: Most copy-protected, 5.25" software expects to be started in   drive A:. This means th
you must select the 5.25" drive as drive A:.

PROBLEM: My software is on 5.25" diskettes and requires two drives (A: and   B:), but my B: dri
is a 3.5" drive.

SOLUTION: Copy the second 5.25" disk (normally in B: drive) to a blank 3.5"   disk. Then, use t
first disk in the 5.25" drive and THE COPY   of the second in the 3.5" drive.   (The type
drive and size of media is generally tranparent to   DOS and its programs).

PROBLEM: You have a double-sided, 3.5" disk drive, but when you format the   disk you only
360K instead of 720K data space.

SOLUTION: 1. For DOS versions below 3.2, you should use the PC-DFMT   program on your mast
pc-ditto disk. See your pc-ditto manual   for copying the PC-DFMT program to an IB
format disk, if you   have not already done so.

The menu option tracks per disk should be set to 80 and the sides   per disk set to 2. T
will provide 720K usable space. (For   your DOS to access this special disk, you must use t
PC- DDRVR.SYS file, also (as described in your pc-ditto user manual).

2. For DOS versions 3.2 and higher, you may use the DOS   utilities FORMAT a
DRIVER.SYS, (both described in your DOS   reference guide). Or, you may continue to u
the utilities   mentioned in 1. above.

Because many people have experienced problems using DOS 3.2 and   3.3 to create 720
disks, the following is an example of   procedures we use when starting with a master D
diskette:

STEP	WHAT YOU TYPE	REASON
1. Boot new DOS 3.2 or 3.3		We must be operating under the correct DOS when using its FORMAT and DISKCOPY utilities.
2. Format a blank diskette a double-sided.	FORMAT x:/S	Replace x with A or B (whichever is 3.5" drive).
3. Copy the files FORMAT.COM and DRIVER.SYS to the newly formatted disk in drive X:	Copy FORMAT:COM B: Copy DRIVER:SYS B:	You will need these files to to format the 720K Disk later
4. Create CONFIG. SYS file on the newly formatted disk in drive X:	Copy CON: CONFIG.SYS DEVICE=DRIVER.SYS/D:0 DEVICE=DRIVER.SYS/D:0 {Press F6 key} {Press RETURN}	
5. Tell pc-ditto	(use pc-dmenu; see	You must use this

drive A: is to   your user manual   newly formatted
be the 3.5" disk   for more information)   disk to use the
in drive x: new file, CONFIG.SYS

6. Reboot computer
using newly formatted
disk containing DOS

You will get messages   This means drive C:
"Loading External   and D: refer to
Disk for Drive C"   720K disks, explicitly
"Loading External
Disk for Drive D"   Drive C: and A: are
                                 the same drive. Drive
                                 D: and B: are the same.
                                 C: and D: are just
                                 used in FORMAT and
                                 diskcopy for creating
                                 or copying 720K disks.
                                 A: & B: may contain
                                 any format disk, but
                                 may only Format/Copy
                                 disks under 720K
                                 (320K or 36K or 180K
                                 or 160K).

7. To format a   For Example:
720K diskette,   FORMAT C:/S
specifying drive
C: or D:

8. Create a CONFIG.   Now you have
SYS on that disk   a 720K, bootable
(see step 4 above)   DOS diskette

To Disk-copy 720K disk to another 720K disk using double-sided diskettes

1. DISKCOPY C: C: 1. This copies a 3.5" diskette to another 3.5" diskette using t
                          same disk drive.

2. DISKCOPY C: D: 2. This copies a 3.5" diskette to another 3.5" diskette using t
                          disk drives.

PROBLEM: You have on 3.5" drive and one 5.25" drive connected to your ST. Your softwa
          requests the disk in the 5.25" drive be placed in the 3.5" drive.

SOLUTION: This problem is most often encountered when installing a software program (i.
          customizing a package for user's taste). The software master disk is in one drive, th
          moved to another for installation.

          1. In the PC-DMenu, select B: drive as (none) and A: drive as the drive you will use f
          installation. Then restart pc-ditto. DOS will have only one drive, and will request that y
          swap disks in and out of the single drive.
                              OR

2. Because of the technical complexities and changes in new   versions of softwa
contact your local Atari user group or   dealer for assistance.

PROBLEM: Copying files to/from IBM disk to Atari disk on the Atari ST

SOLUTION: The Atari GEMDOS can read and write almost any format of MSDOS disk used on
IBM PC or compatible.

Also, files may be copied to/from IBM/compatible disks on the Atari.

These facts are obscure, as they are not heavily promoted by Atari Corporation.

CAUTION: Atari disks created/formated by the GEMDOS, however, can not always be read
PC/MS-DOS (even versions 3.2 or higher). This brings us to the next problem and solution.

PROBLEM: I tried to read a GEMDOS disk using DOS. I tried this on the Atari using pc-ditto, a
on an IBM compatible. But, the disk appears to not be readable.

SOLUTION: The GEMDOS format is almost compatible with the DOS version 3.2 720K 3.5" form
but not quite.

1.   You may use our device driver, pc_ddrvr.sys, to read and write your GEMDOS dis
under DOS;

OR

2. You may copy them to a disk which was formatted by PC/MSDOS. This may be done
either an IBM/Compatible, or by using pc- ditto on the ST.   Then, use that disk on yo
PC/compatible.

NOTE: Any files may be copied, except for copy-protected programs, but the most common u
is to transfer a text file between the two computers.

PROBLEM: I have a second 5.25" drive connected to my Atari ST. But, when I try to use it,
disk I try will read properly using GEMDOS.

SOLUTION: There are several technical reasons why your drive may not respond when usi
GEMDOS.

First, if you can use the drive with pc-ditto, then electrically your connection is probab
sound. Therefore, you may need to tell GEMDOS about the drive speed. One program
have found success with is SIXMS.PRG, a public domain product, available on many pub
domain bullentin board systems. Use of this program permits you to read and write 5.2
diskettes.

Second, if you can not use the drive with pc-ditto, then it most likely is connect
incorrectly. In that case, you may need to seek help from your local dealer, the compa
who sold the drive, or even a local Atari ST user group.

Software Certified on pc-ditto
  (version 2.0) as of 6/1/87

1. Spreadsheets/Integrated Packages

Ability
Enable
Express Calc
Framework
Framework II
Javelin
KnowledgeMan/2
Lotus 123
Multiplan
PFS: Professional Plan
PC-Calc
Supercalc 3
Supercalc 4
Symphony
The Smart Software System

2. Recreation

3-Demon
ABM
Backtalk
Battlezone
Blackjack
Buck Rogers
Castle
Cyclops
Dragon World
FlightMare
Hobbit
Infidel
Island of Mystery
Jet
Jump Joe
Microsoft Flight Simulator
Mind
Monoply
Musician
NFL Challenge
Novatron
PC-Golf
PCChess
Piano Man
Planet Fall
Pool
Serpentine
Spacewar
Starflight

Startrek
Striker
The Witness
Trekrun
Zork I, II, and III

3. Graphics

Art Studio
Atlas Mapping Software
Chart Master
Charts Unlimited
Cheap CAD
DDCAD
Dan Bricklin's Demo Program
Draw!
EasyCAD
EasyFlow
Executive Picture Show
Freelance
GRASP
Graph-in-the-Box
Graphassembler
HyperGraphics
Lady Bug Graphics
Map Builder
Microsoft Chart
PC Storyboard
PC-Draft
PC-Key-Draw
Personal Computer Picture Graphics System
Present Slide Presentation System
ProDesign II
Slide Write Plus
The Grafix Partner
VCN Concorde
World

4. Personal/Home Finance

Chase Spectrum
Dollars & Sense
Finance Manager
Invest
Loanpak
Managing Your Margin
Money
Options
PC-Check
PC-Stock
Swift Tax
Sylvia Porter's Investment Manager
Sylvia Porter's Personal Financial Series
The Evelyn Wood Dynamic Reader

5. Project Managers

Harvard Total Project Manager
Job Scheduler
Microsoft Project
Planning Tools
PC-Hibol
ProTracs
SuperProject
Timeline

6. Word Processing - Addons

Electric Webster
Exact
PC-Outline
Resident Speller
Think Tank
Webster's New World Spelling Checker
Whoops

7. Business Productivity

1-2-3 Report Writer
Bottomline
1-2-3 Report Writer
Bottomline V
DataLaw/PC
DataLaw/Mgr
Datamite
DesqView
Dosamatc
Exsell
Flashcode
FormTool
GEM
Holmes
Inset
Instant Recall
IT Figures
Keep Track
Keynotes
LETTRIX
Markis Marketing
Metro
MonoGrafx
Multiple Choice
Org
PC Window
PC-Desk II
PC-DeskMates
PC-Menu
PC-Tracker
People Planner
Printworks

Q&A
Q-DOS
Qwikeys
Reports Plus
Salemaker
Sales Repeater
SB Assistant
Sidekick
Sideways
Smart Notes
Superkey
The Newsroom
Whats Best!
WindowDOS
X-Y-Z:Consolidate
X-Y-Z:Query
X-Y-Z:Spread

8. Utilities

1dir
Arc
Alter
Back-it
Beep
C-Format
DGS-Edit
DMS (Disk Management System)
Diags
Dismod
Disptest
Download
EBL (Extended Batch Language)
Eraq
Fancy Font
Fatdump
Fileminder
Fileminder
Flashcode
Form Manager
IBM Professional Editor
Keyword Commander
Lsd
Lu86
Lasercontrol 100
List2day
Mach2
Microsoft C Codeview
Move
Newkey
Norton Commander
Norton Utilities
Nosetarc
Nostradamus Utilites
PC-Status

4

Page
Path Master
Printer Boss
Program Master
Query
R-DOC/X
Recall
RE/Call
Rendir
Screen Generator
Screen Sculpter
Sdir
Secure2
Setarc
Showback
Sorted Directory (d.Com)
Speedy3
SquareNotes
Stay-Res
Still River Shell
Superen
Sweep
SymDeb
Treedir3
UltraPrint
Ultra-Utilities
Util
VCopy
Watchdog
Wordtech dBase III Compiler
XTREE

9. Operating Systems

Compaq DOS
Eagle DOS
IBM DOS 1.1,2.0,2.1,3.0,3.1,3.21,3.3

10. Word Processing

Brown Bag Word Processor
DataFlex
Documax
Facelift 2
IBM Writing Assistant
LeScript
Lotus Manuscript
Microsoft Word
MultiMate
OfficeWriter
PFS:Professional Write
PC-Write
Volkswriter 3
Word Perfect
Wordstar

XY Write

11. Languages

ESIE
GW Basic
Microsoft C
Microsoft Macro Assembler
PC-Hibol
ProFlo
QPro4
Quelo 68000 Assembler Package
True BASIC
Turbo Pascal
Turbo Pascal Graphics
Turbo Prolog
XGEN
Zbasic

12. Training

AutoMentor
IBM Tutorial
Tutor

13. Database

Cornerstone
Enrich
File Express
FoxBase+
IBM Filing Assistant
Oracle
PC-File
PC Manager
PowerBase
PractiBase
R:base 5000
RESQ
Reflex
Seekeasy
ZYIndex
dBase II
dBase III
dBase III Plus

14. Accounting

BPI Accounting Series
DAC Easy Accounting Systems
Dome Simplified Bookkeeping
One-Write Plus I
One-Write Plus II
Open Systems
Open for Business Accounting

PC-Accounting
PC-General Ledger
RealWorld Acctg
Simple
Solid Gold Real Estate
TAS-Books

15. Communications

1 Ringy Dingy
ASCOM
Carbon Copy
Crosstalk XVI
IBMMINI
Procomm
QModem
Smartcom II
TeleVision

16. Education

Software Express Education Collection

\#: 70004 S5/Business Users
   19-Jul-87 19:02:38
Sb: #pc-ditto support online
Fm: bill teal 73537,617
To: Antic Software 76703,202 (X)

Chuck Sadoian
The answer to your monochrome question is in our general comment message which follows this one (and follows, and follows... Sorry, but Compuserv message sizes limit message lengths, and I could talk the labels off keycaps at fifty paces)

Ken Cheek

1. Bugs are fixable in the field. See following message. We're just gathering all the bugs, before we issue a patch.

2. DOS 3.3 may have strange bugs concerning the fixed drive. We have not run into them ourselves yet. Be cautious of booting DOS from the hard drive with 3.3. Let us know if you have any random problems with disks and directories.

3. Regarding the 5.25" drive, we're not engineers. So, we hesitate to recommend anything about connecting drives. Rather, we refer you to I.B. Computers for their drives, or others here may be able to provide you with complete info.

4. The SF354 will format an 80-track single-sided DOS disk under pc-ditto. Check our message last week, or let me know and I will upload text files of examples to perform it under DOS 3.2 and 3.3. (However, if errors are causing formatting problems, our next patch should fix the problem).

Julius Oklamcak

Thank you for your kind words.

Also, we change the precomp write for use with 5.25" drives under pc-ditto. (Incidently, this is one reason why we ask for the type of drive in our pc_dmenu configuration program).

Avant-Garde Systems pc-ditto general support information

Field error corrections policy:

  We plan to notify dealers shortly of error corrections for several   products. They will have a disk which will patch the pc-ditto disk.   We are currently researching the copyright provisos for this online   system, before uploading patch programs here. (This system may   copyright our material, which is a no no. If this is true, we may   provide alternative field update procedures for owners not near dealers.   If this system, however, does not copyright our material, then we will   upload here our patch systems.)

  This is not an update, only a bug fix to original versions (2.0). Updates contain product

enhancements. The next update is due this fall.

Sorry, we forgot something...

Definitions:
Update Version of product is the number before the period (currently that is a 2).
Minor version is number after the period (currently 00).
Updates increase the Version. Patches increase the Minor Version.

Updates are issued on new disks to owners of the product.
Dealers with old versions are asked to return their packages onhand and are provided with replacements.

Patches are provided to dealers and consumers in various forms. No replacement of packages are performed. Instead, the consumer or dealer may use the patch to revise the product. For example, if you purchase version 2.00 from a dealer, and version 2.01 patch is available, you may apply the patch to a backup of your product.

The main reason for this approach is to provide fast, economical fixes for bugs and other minor problems (such as disk documentation) in the widest medium format possible. Fixes do not add to a product's features. Updates do. Fixes are short, but enhancements are usually long and involved. Hopefully, this will meet most of your needs.

The following is a status update on current problem field reports we have received to date:

1. Some DOS operating systems do not work entirely:
Zenith
Blue chip
PC's Limited
Hitachi lap top

We originally tested DOS-es which were widely available and which are assured to provide fully compatible system interfaces. IBM, Compaq, and Eagle were found to provide this without exception. We realize that other manufacturer's provide DOS. Regretfully, we have not been able to provide a DOS ourselves, ...yet. In the mean time, we will test some of the more popular DOS-es. But, let us caveat that some versions just may provide too much difficulty to make compatible with standard DOS applications.

Avant-Garde has to define some standard of compatible with which we will provide. We use the IBM PC XT, for now. You can imagine the impossible task if we tried to become compatible with all other compatibles on the market, as well. This is why some DOS-es may never work completely on pc-ditto. If nothing else comes of our exercise, at least we will let you know which DOS-es to definitely stay away from.

Therefore, here's how we will proceed. Let us know of your favorite DOS maker. (we'll try to get as many as we can, but some may only be bundled with hardware -- and, DO NOT, please, send us your DOS -- you may break your vendor's license).

If the DOS does work correctly on a stock IBM PC XT, then it should work on pc-ditto. But, the DOS may not work correctly on pc-ditto. So, we will fix pc-ditto.

2. Hard drive owners:

2

a. Drive letters on start-up screen show assigned to partition 0.

b. Reading files on any hard drive letter still gives only drive C: files.

c. Accessing drive letters on 3 and 4-partition drives gives disk error message ("Bad sector...", "I/O error on drive...", etc.)

The reasons for these problems are varied: they depend upon the DOS used, the type of hard disk and controller, and how the disk is partitioned and formatted.

Some of the problems have been duplicated and are being corrected and tested.

This and the next field report are the highest priority.

3. Single-sided drive owners (SF354):

Disk errors on reading disks written and formatted on single-sided drives are occurring occassionally. There appears to be no special case causing the error (i.e., 520 and 1040, one and two drives, etc).

We have found the following error messages to be caused by the this problem:

"Boot disk failure" "I/O error"

However, we have received one of the offending drives and have duplicated the problem.

4. PC_DFMT

Unusable is the common complaint. The cause is the program can not format a virgin disk (i.e., never formatted disk) without an error.

Some users tell the program to retry the error several times, and the program formats successfully. But afterwards, the system locks up.

Other users find the program never formats or does anything at all.

Explanation: There is a bug. In our production testing environment, our test matrix said format a blank disk. We did not realize until we began getting reports from you that the testing had been done with blank, but pre-formatted disks. Virgin disks, were never used. Thus, a bug to be fixed in an upcoming patch.

A note for some DOS users: the format programs used by DOS are very sophisticated. That is, they perform more than what on the surface may appear to be simple formatting.

Furthermore, format programs cannot be interchanged. One manufacturer's format should not be used with another's DOS. I won't get into why now, but this should be a word of warning to the wise.

Therefore, pc_dfmt was designed for IBM, Compaq, and Eagle DOS. Other DOS-es may cause it to hiccup. We will do what we can to broaden pc-dfmt's usage, but we may be limited to purely practical needs, time, and whether we can quickly learn a manufacturer's DOS internal's (which is tough without the source).

5. Multimate (version unknown)

Supposedly, there is a lockup on the file selection screen. We have not duplicated this, but are trying a new version. We will notify when we have found the problem.

3

6. Screen colors change after using certain programs.

Some applications, such as Turbo Pascal and the pfs: series, change the screen colors. After exitting the application, the original colors are not always restored to their original settings.

This occurs on an IBM and compatible also. This is the fault of the application. We have found that the clear screen command (cls) to correct for this.

7. Atari black and white monitor does not work.

You're right. And, we hear you loud and clear. Please be patient. It's not supposed to work right now. There will be a free update this fall for it and other enhancements.

Also, the black and white monitor will support the IBM Monochrome Display Adapter (MDA) and the Color Graphics Adapter(CGA), just as the color does now. Color will be 16 levels of grey scale.

8. Files on some diskettes and the hard disk are shown under the GEM directory, but not when directory is listed under DOS.

DOS uses the file attributes in the directory. Specifically, hidden and system attributes cause a file not to be shown under the DOS (although some programs, such as Norton Utilities(TM), will show them). You may have to change the attributes, using a public domain or commercial utility. Let us know if you need more specifics on the attribute or special utilities for this problem.

By the way, since we're not GEM programmers, others here may provide help for you with GEM programs (to whom we owe our gratitude in advance).

******end of general message*******

UNTESTED SIDE NOTE:

#: 70092 S5/Business Users
    20-Jul-87 15:11:26
Sb: pc-ditto support online
Fm: Richard Morris 72327,1323
To: bill teal 73537,617

To those who have bought pc Ditto and want to run it on monochrome, heres how you can patch out the monochrome 'off' routine. Using Disk Doctor go to sector 124 and search for this hex string, 670A19405E1C. Change the 67 to 60 and save the sector. This changes a conditional jump to a jump. The video quality is somewhat strange (you are in the wrong rez) but it does allow it to run. Richard Morris, sysop Chem-Link BBS 918-437-3837 90 megs 9600 baud

----

#: 69395 S5/Business Users
    12-Jul-87 22:18:17
Sb: #pc-ditto support online
Fm: Bill Teal 73537,617
To: All

Introduction ------------

We would like to introduce ourselves: we are Avant-Garde Systems, manufacturer of pc-ditto for the Atari ST. The company is small, comprised of just two of us -- Ginny and Bill Teal. (Because we are not sure of the length of messages here on your system, we will break up our message into five parts.)

First and most importantly, we wish to thank everyone who has supported us so far on just blind faith: dealers as well as consumers. In particular, we wish to say a special thanks to those on this message base who have carried the torch on our behalf until we could get here:

Dave and Sara Groves Jeff Williams Jack Duree'

Piracy -- We know that some rumors abound regarding the piracy of pcditto and the effect on Avant-Garde. We would like to go on record and eliminate any pesky rumors you've heard. A couple of weeks ago, we began to receive calls from dealers regarding piracy of our product. Not one or two, but in our phone log, now well over a hundred; fairly well scattered across the country. This might not seem unusual in this electronic age, but we were astounded by the sheer numbers of individuals who began contacting dealers and ourselves for support and disk drives. When we originally decided to enter the retail marketplace, we took into consideration that some piracy would occur. This, like similar events in other industries, goes with the territory. But, it still hurt our feelings, after we tried to give the market a good product, at a good price, a free update, and to offer to listen to the market so as to improve the product and service in the future.

So, are we going out of business or do we plan to roll over? No. Thank goodness for those of you who supported us. You have shown us that the entire Atari market is not corrupt. Only, that it sometimes seems so. If you continue your support, and your friends continue, then we will work even harder to earn your respect, to provide you the best support we can and keep all the promises we've made. Maybe, if by providing great support, more updates, and maintaining good prices, most people who want the product will ultimately want the real thing.

Support policy -- Please send in your registration cards. Many manufacturers tell us that only 20 to 30 percent of these cards are ever returned. We are providing a free update. This will be the only way we will know where and to whom to send an update. Also, if you call us, we can not help you if your card is not on file. Lastly, we are making the next update free, as a way to entice you to tell us what you think. The next update will contain enhancements, rather than bug fixes. But, we want your input. We do want the product to be useful to you. So, call, write, or send a message to us here.

About once a week we will visit this system, to reply to your questions. Usually, on Sunday.

Since we view this medium as a technical support system, you may find that from time to time you ask us questions which we may not respond to. We will not give our opinion, speculate about the future, nor enter into debates of a non-technical nature publicly. Please send us E-mail, if you wish to covering other ancillary topics. Because this system costs money, we want to save those who come here time and aggravation, instead of cover a lot of irrevelant ifs, maybes, and should haves. It appears that this professional attitude is already in place here...we would just like to continue it. Thanks.

Finally, many of you may find it hard obtaining pc-ditto at your local dealer. We are working on this. We have one phone line. We are installing others. Also, we did not expect the overwhelming rush to buy this product. We had anticipated a slow summer in which to build up our credibility and advertise to dealers. Instead, you surprised us. Have patience. We won't forget you.

By the way, our address is:
   Avant-Garde Systems
   381 Pablo Point Drive
   Jacksonville, Florida   32225
   (904) 221-2904
   a dealer order number is coming shortly

Design of pc-ditto ------------------

1.   The Atari monochrome monitor (which we refer to henceforth as the Black and white or B/W) is not supported in production release version 2.0. Please do not buy the system if you have only the B/W monitor; pc-ditto will not work.

There has been some confusion over whether the documentation or the outside packaging is correct. The "requirements" on the outside back of the packaging is correct. The B/W monitor support will be included in the first update. We make no apologies for our initial decision. Unfortunately, this decision excludes about 20 percent of the U.S. market (according to Richard Frick and Sig Hartman at Atari). Quite simply, we did not have sufficient time and resources to implement and test the monitor. Do we want to exclude this market? No. We are probably losing money right now. But, any manufacturer has to weigh opportunity costs of decisions. Our cost was to not support B/W monitor, or delay announcement of the product by 3 to 6 months. We knew the window of opportunity for launching this product was this summer for both U.S. and European sales. Any later would most likely mean missing targets for advertising and promotions during the "back-to-schoool" and "Holiday season" buying periods. Approximately 40 percent of the microcomputer sales are made during these periods.

That is why we officially state the B/W monitor support will be in the first update. Furthermore, we have been told by a major magazine reviewer regarding our product: we made the wisest decision. Had we chosen to initially support the B/W monitor, most people would have said "Ahhhh. Color is impossible." Instead, psychologically, implementing color makes people think B/W is simple. (Well, we wouldn't go quite as far as to say, simple. Just that it is about the same). In any case, there is one other rule we have about products. They are tested.

Should we prematurely release an untested product into the market, you would have to wait just about as long to get an update to fix it, should it be a disaster. We prefer your wrath now, and will work harder to recover your faith, when we release a solidly tested product. In the first instance, we destroy something we can never quite recover: your confidence in us and our product.

2.   80-track 5.25" drives -- not currently supported to read 40-track media (even if just to transfer data). We are working on a simple, utility which will get the job done under DOS. This will be out shortly. If enough need is voiced for this, we can always make a "hardware" switch, later.

3.   Programs on our certified list -- my wife and I have limited financial resources. We tried to select DOS applications which have widespread appeal. Our most objective scorecard of the most popular programs is the list of top 40 IBM programs sold by the distributors: Softsel, Ingram, and Micro D. We will continue to update this list about monthly; here, and with a list to dealers. If your favorite program is not here, that does not mean it will not work. But, like many compatibles, we are not perfect. (That's why we sell through dealers.. so you can try before you buy).

As we fix bugs and make other improvements, many non-working programs may start running.

And, we appreciate all the calls you make regarding which do run. Please understand, our official list is only updated when we have tested the product ourselves. We make this policy because if you call with a problem, we can duplicate it (in most cases). For you to rely on someone elses word is less than professional for us, since we have to stand behind our product.

4. We never realized there would be such a debate over the poor little mouse. It certainly makes sense that if a mouse is attached, and free, that a product support it. Well, when we surveyed the market to determine what dealers and consumers wanted, we we told "IBM PC XT compatibility." So, there is no mouse on a stock PC XT. Two, most of the programs on the market directly do not support any mouse at all. What you will find is when you purchase a mouse, it will include two kinds of software: a mouse driver -- which knows how to talk to the mouse hardware; and applications interface software -- which is usually customed designed for the most popular applications, such as Lotus 1-2-3, and includes the pull-down menus, and the like.

We intend to provide the driver. And, a generic mouse which generates cursor keystrokes, with maybe the right button to generate a user definable key (say, carrige return). Now, either will be selectable from our menu. At this time, unless you already own IBM mouse interface software, from Microsoft, Logitech, Maynard, etc, then you may end up using Generic mouse. The cost of developing interface software is very large. Any one looking for a low cost market to develop for, here you are. Of course, there are some public domain mice programs, such as PMM (poor mans mouse), available. We will keep you posted as we go.

5. There is no support for the European keyboards and timers yet. That version will be released to European distributors this summer.

6. The new blitter may help some screen updates, but we don't know. Little information about them, and the machines they will be supported on, is currently available.

7. Megas with 2 and 4 Meg memories, as well as upgraded 1.5 to 4 Meg STs will be supported by pc-ditto.

8. Color text support -- One IBM CGA mode, 80 column text, permits 16 color backgrounds and 8 color characters. The Atari ST only supports 4 colors in 80 column mode. We DO allow you to choose which 4 colors. Unfortunately, this is one limitation placed on us by hardware design. However, we have not found this to be very limiting. Try it yourself, before discounting the ST. Also, the other CGA modes are supported fully. Therefore, there is no loss of graphic color or resolution capability.

Current bugs we are working on are:

1. PC-DFMT doesn't always like to format a blank disk without error.

2. Hard disks partitioned sometimes indicate all logical drives assigned to partition 0. This especially true of separate external drive/controller combinations.

3. Documentation:

    a. We refer to TOS system disks in the manual. We mean GEMDOS format disks.

    b. We refer to the Atari monichrome monitor in the manual. At the last minute, we left this in so we would not have to reprint the manual for an update. We do state on the outside package, however, that color monitor is currently required.

    c. There are minor typos in the Problem/solution section in the README.1st file.

7

4. Self-booting disks -- These are disks which require no operating system to run. Generally, they are started using the CTRL-ALT-DEL key combination of rebooting pc-ditto. We perform a special check of the boot sector we start a disk with to ensure novice users have not left the GEMDOS disk in the A: drive accidently. Unfortunately, as these things go, we look for a special IBM signature. To correct this, we will look for GEMDOS in the future. Please do not patch the system. You WILL cause irregularities in system operation, especially where disk writes occur.

Next Update Information

1.   The next update to current owners of version 2.0 is FREE. Contrary to some nasty rumors that suggested otherwise.

2.   The next update will be this Fall. Exactly when we do not know. As a policy, we announce products when they can be obtained right then. This is to prevent vaporware. For some of you, this may not seem soon enough. We are sorry. But, the software development road is littered with many dead bodies of consumers who relied on some vaporware date. Until someone can make an exact science out the viscous art of software development, we are stuck with the frailties of the inestimatable. Therefore, we will not lie.

3.   Please, please, send those registration cards to us. Again, we do not know who you are without them. Consequently, we will not send you your update...which you deserve and have already paid for.

4.   For dealers, we currently investigating how to do updates to help you get return customer traffic. Because of the piracy problem, and the fact that our product is not copy-protected, this is a very sticky situation. No matter what is resolved, you will be notified of updates, and your inventory replaced.

5.   The reason for the FREE part of the update is two-fold. First, we don't believe in you paying us for bugs. If we did, we would have designed bugs into the system, marketed several add-on modules to fix different bugs, and charged a lower price for the main product. We would like to treat you the way we want to be treated ourselves.

 Second, we want to encourage you to let us know what enhancements will add value to your product. We are a consumer-oriented company. We do not invent technologies and foist them onto the public. Instead, we know that the way to continue sales is to improve the product and service to meet your needs. Sales only occur when needs are met. So,.....what do you need? Don't be afraid to be absurd (though, don't just make things up either). We will review your needs. Implement those needs we can. If we can not, we will also tell you, and why. We are always looking for ways to improve our product. We're listening.

6.   Topping the current list of needs are:

B/W monitor support (selected for the next release)

Mouse support --   Microsoft
    Logitech
    Maynard

Midi hardware support

Time/date carry over from the Atari GEM time/date

Specific questions

1. Which single-sided 3.5" disk format to boot DOS from?

Our utility, pc-dfmt, will not let you create a single-sided 80-track bootable DOS diskette, because the DOS you may be using could be lower than version 3.2. Thus, for DOS versions below 3.2, you may only create a 40- track single-sided bootable DOS diskette. You may, however, create 80- track data diskettes (containing no bootable DOS) for use under DOS versions below 3.2. See our user manual and README.1ST file for details.

For DOS version 3.2, there is a simpler way to format high-capacity diskettes. You may also create bootable (that's right Bootable) 80-track single-sided DOS diskettes.

This works for IBM and COMPAQ DOS versions. (For all other DOS makers, we haven't tested this).

Create a Config.sys file containing the line:

DRIVPARM=/D:x/T:80/S:9/H:1

(replace x with a 0 or 1 depending on which physical drive is 3.5"
0 is a: 1 is b:)

Now, using the DOS FORMAT command, you can create the SS 80-track disk, optionally bootable with DOS.

2. Can't Avant-Garde find a way to override the DOS drives to reduce the confussion regarding device drivers with various letter assignments.

Unfortunately, our job is to act like hardware. Once we begin to take over the functions of the DOS, we lose the compatibility and would probably introduce complexities in other areas.

However, if you think you know the answer, let us know. Thanks.

3. Can't Avant-Garde make the creation of the CONFIG.SYS and the formatting more automatic, say by using batch files?

Maybe. We'll look into it. Everyone's hardware is so different, making a general purpose utility to accomplish this may still be quite a task. Any DOS programmers out there up to the challenge? (How about a DOS shell?)

This is perhaps why many of you, inexperienced with DOS, may find that the GEM environment is so much easier to use. The command line approach to running a microcomputer is difficult and often ambiguous. Add to that the evolution of new hardware, even as simple as 3.5" drives, and some systems seem to be very poorly designed to handle it, without extreme contortions on the part of the operator.

Anyway, we're looking into some sort of simplification.

4. Isn't there some way to improve the creation of 3.5" 720K disks?

This is a problem inherent in the design of DOS. We will try to find the simplest and best way to create them. Let us hear your success tips. Maybe we can come up with the all around best "cookbook" rules to handle DOS formats.

#: 66890 S5/Business Users
    16-Jun-87 21:11:04
Sb: Info on PC-Ditto
Fm: David and Sandy Small 76606,666
To: Pc-Ditters

I spent awhile on the phone with Avant-Garde (like three hours) talking about PC-Ditto, so I thought I'd pass some info along, since there's a lot of curiousity about it.

Jerry called me up from Comdex and said it was amazingly good. He'd done all the things like under the table for a PC or inside for an 8088; it's a software emulator, all right. Then, he got a bunch of his own software to test it on.. and lo and behold, it worked. He ran LapLink and DesqView on it, and while he says it's slow, it does work. Apparently the emulation is at the chip level.

The guy who did it is an ex-IBM'er and sales type -- he was a pro salesman, believe me -- who's working on it with his wife. Mom and pop shop, so to speak. They've had lots of marketing offers and are very very busy. Don't expect to get through on the phone, it's always busy.

My own experience with emulators is that you lose a 4X in clock speed with necessary overhead. So I'd expect about a 1-2 Mhz IBM out of this. The good thing is that I/O is done at 68000 speed, 8 Mhz, so it will only appear slow when you get computation-bound..like recalcing a spreadsheet. Burt just copying files, etc, it ought to scream along pretty nicely.

The big thing that they told me was they wanted everyone to know they weren't connected at all with the MS-EM people. Apparently they had received mucho negative feedback on that other product.

They've tested and certified it with lots of different IBM products; they went through a top-40 IBM product list and it ran all that stuff. The guy who's doing it sounds technically competent and is a good salesman.

Caveat: this is all based on a telephone conversation, but he does know what he's doing with emulators, and it's for real.

I'd suggest getting them online on CIS a.s.a.p. to answer questions. It sounds like it'll be a good product.

-- Dave

??: Bill Teal, founder of Avant Garde systems...
??: who publish PC DITTO, an IBM Emulator for the ST....
??: Bill: Would you like to make any opening comments? ga
   BT: Basically, thank you for the invitation here.ga
??: Bill: Pleasure to have you here!...
??: Okay, we're going to open the floor for questions...
??: if you have one, simply type a ?...
??: and I will recognize you to speak in turn....
??: CSM ---> You're up. ga
??: Two questions first...
??: 1. Do you support GERMAN ROMs
??: 2. When is mono out?

   BT: Good question...
   BT: First, yes. We do support German ROMs...
   BT: We have versions for all European systems...
   BT: currently under testing...
   BT: We are working with European distributors...
   BT: to provide them with a license of the product...
   BT: so they may translate the manual, resources, and etc...
   BT: into the language they will be supporting...
   BT: That is underway now, and we are working...
   BT: with Sig Hartmann at Atari, also...
   BT: to coordinate this...
   BT: Second, mono for the Europe systems will be...
   BT: done at the same time (i.e. same package)...
   BT: as the European pc-ditto...

??: I have problems getting the pc-ditto up and running
   on my 1040st as well
??: as my 520st at work.
??: Steve, what sort of Trouble...
??: so that bill can maybe give you some help?
??: Seems to be with the msdos formatting. I use 3.0 with
   an at and don't get the dot and double dot hidden files. Then copies of MS
??: Steve, You have to hit the <cr> about every 79th
   character...
??: We got through MS in your last line.
??: Anyway the msdos copy then does not read off my 3.5 disk
??: I have tried to use the Format A:/S and erase the ibm
   bios etc but still no
??: luck with the blasted thing. we have an xt with a 3.5 on
   it, but you can't"t
??: format a single sided 3.5 using the Format A:/1. command.
   i'm almost reduced
??: to buying the 3.5-in disk of msdos when i already have a
   3.0 version available
??: Bill, it that enough for you to get a handle on Steve's...
??: will you correct the next version to allow use of the
   720k 3.5 formatted disk?

??: Problem and respond, or do you feel that it would be better answered in an Email or message? ga

    BT: Ok. I try to pull together what...

    BT: I think you said, Steve. Just say yes or no...

    BT: if I get it correct...

    BT: First, you are formatting a single-sided disk...

    BT: and try to write to it...

    BT: and no luck, especially with creating directories...

    BT: Is that correct?ga

??: I attempted to format a 3.5 with IBM MSDOS 3.2 and get a disk without the

??: hidden dot and double dot files, which then won't read after copying MSDOS

??: onto the disk.

??: Any cures, Bill? ga

    BT: Steve, could you leave a message or E-mail...

    BT: Your problem may be very simple to solve, but...

    BT: the audience here may not be fully interested...

    BT: and I need to cover more information...

    BT: with you.ga

??: If it helps any, i learned the interesting fact that format a: on the msdos

??: Thanks, Bill and Steve, we will have to move on as 5 questions..

??: are waiting in que...

??: Steve, leave Bill a message and he will respond there..

??: C3 on our at gave a format without hidden files that chkdsk couldn't find but

??: Jack Durre', you're up. ga

??: Thanks...Bill, first indications were that piracy was severe...

??: on your program, but I'm wondering what the situation is now? ga

    BT: Jack, I know that we...

    BT: discussed this at length on the phone...

??: The use of /s generated the hidden files. Strange...for sure. Yes i will leave a message if i don't mess up using the protocol involved...

    BT: but for everyone's information...

    BT: I'm not sure how much an impact piracy...

    BT: has had on us. In short, we were pirated...

    BT: 7 days after our product was shipped to the...

    BT: first dealer. I know that some wanted to...

    BT: check out the program, before being burned...

    BT: by a possible fraud, and I think we...

    BT: convinced many that we were real...

    BT: The bottom line for us is simply...

    BT: that we are getting sales, and as long...

    BT: as we continue in business, we are going to...

    BT: work our bottoms off to give the best...

    BT: support, service, and product we can...

    BT: Perhaps, even, we can win a few pirates over...

    BT: to get the real thing. Only time will tell...

    BT: if this idea is insane.ga

??: That's what I was _hoping_ to hear! Great!!!(and thanks!) ga.

??: Thanks, Bill, follow up, Jack? ga

??: 1. How much RAM is left after running PCDITTO and MSDOS?

??: Two questions?

??: 1:Is their any hope to improve the speed of the bit mapped
graphics

??: 2:Do you have any suggestions for 1040 owners who have
purchased a 5 1/4

??: drive to make it drive a so that we could run some of the
copy protected

??: Software that require it to be in drive A(Right now it is
assigned dr b ?

  BT: Mario, first...

??: Bill, hit Mario's and then we can go to Robert's.

  BT: I can say how much is left after pc-ditto is loaded...

  BT: available for DOS AND its applications...

  BT: 384K for the 512K machine, 703K for the 1Meg and above...

  BT: (DOS generally takes somewhere around 20-40K)...

  BT: Robert, Yes. We're working on improving all aspects...

??: hello, bill...what is the retail on the pc-ditto package?

  BT: of pc-ditto performance -- especially graphics...

  BT: And, if I understand your 5.25-inch drive...

  BT: question...

  BT: then, the answer is that the drive can be...

  BT: assigned as the A: drive to run copy-protected software...

  BT: Does that make sense?ga

??: Yes

??: , that do it? ga

??: . Thanks, Robert...

??: my question is in three parts

??: rick schneeberg) How are sales? How has atari responded to your pc
emulator?...

??: and is it true that your program is only available thru
mail order?

??: Bill, ga

  BT: 1. Sales are excellent...

  BT: 2. Atari has been the greatest supporter...

??: Mr. Teal, I may have missed the answer, but will
monochrome be supported?

  BT: Atari invited us to show...

  BT: their booth in March 10 at New York...

  BT: and has been behind us ever since...

  BT: 3. It is false that our product is...

  BT: available from mail order. In fact, mail...

  BT: order undercuts our dealers and we do...

  BT: not currently supply mail order directly.ga

??: That cover you, Rick? ga

??: i'm in new york and i have not seen it yet.

??: Will quality alert 2.5 run under pc-ditto

  BT: Sorry, Rick. Found out I supposed to answer...

  BT: Where in NY? The City?ga

  BT: Ok. See Bruce at Park Ave Video (in the 20's) in
Manhatten...

??: send 15 I am back at 300 baud as John Hood.

??: Thanks

??: Ok, John you back? ga

??: Yes I am.

??: Ok, you are up to ask bill. ga

??: Two questions: 1) Does the emulator support Hard disks?...
??: and 2) How deep does your chip emulation go?...
??: (Don't be afraid to quote part numbers.) ga
    BT: Well, John...
??: can you give a rough speed comparison of say,Dbase III+...?
    BT: Yes, pc-ditto does support hard disks...
    BT: and to answer you second question,...
    BT: I would have to have a very long answer...progress...
??: ?
??: does the emulator work with 1040 dd drive?
    BT: Perhaps, if you like, I can upload a list to the libraries?ga
??: Yes, that would be nice. One thing, does HD support all...
??: partitions? ga
??: randy) ?
    BT: Currently, pc-ditto supports only 4 partitions...
??: what?
    BT: on only one drive (LUN 0)...
    BT: In the future (next update?), we will...
    BT: support the full 12 parts and mult LUN's...
    BT: (and this credit goes to Mark and Willie...
    BT: at Supra for their very fine help..
    BT: which they aren't even responsible for...
    BT: Plus, we're hoping to see the Laser...
    BT: printer to see how the DMA will be shared.ga
??: Thanxs, that answers my questions.
??: Thanks...
??: Is there a Don that I missed...
??: I show the following batting order...
??: Mike, Peter, Mike, Sheldon, Jack...
??: Mowgli, Patrick...
??: then Randy...
??: Don, if you are there ga...
??: Ok, Mike, Job # 82. ga
??: Make that Mike Schuster, ga.
??: Thanks Dave.
??: Bill, hope PKXARC isn't giving you too many headaches. Two
   questions...
??: 1. Would it be possible to allow for a PC warm boot upon
   CTRL-ALT-DEL...
??: instead of returning to the ditto title page (choose via
   menu?)...
??: 2. Is there any way to address the ST rom's or clock?
   (e.g. I have a...
??: smartwatch installed under one of my roms -- is that
   memory mapped...
??: ANYWHERE that ditto can find it? Thanks! ga
    BT: 1. Not too many headaches...
    BT: 2. Yes, but I haven't thought about it for more...
    BT: than 2 seconds. Answer might change...
    BT: 3. Possibly. But, we are going to
    BT: provide DOS the option to use...
    BT: Atari's clock and date at startup.ga
??: That would satisfy me! Thanks .. ga Dave
??: Thanks...
??: Jack, Mowgli, Patrick, Randy and then CSM...

??: Jack, ga.
??: What future support is planned for autoboots and sp{eedups, Bill?
   BT: Just to make sure our definitions...
   BT: are same, what is an "autoboot" to you, and...
   BT: speedups are being researched and implemented...
   BT: as we get them tested. The major work...
   BT: is taking a great deal of effort, because...
   BT: we must deal with the same level of system integrity...
   BT: as we have now.ga
??: ...
??: An IBM disk that would boot w/o a directory file is "autoboot"...
??: Mowgli is next...
??: and we can let Jack follow up in just a sec...
??: first...
??: by my definition...and "Autoexec" I believe.
??: Chmn, ?
??: and I understand the requisite care for integrity of the system.
??: ga
   BT: Ok, I agree re: autoboot def...
   BT: Now, many of the autoboot disks...
   BT: currently work...
   BT: but...
   BT: we put a check in for the IBM signature...
   BT: in the boot record, so our novice Atari users...
   BT: would not try to boot an Atari GEMDOS disk,...
   BT: when it was accidentally left in the drive...
??: (good thinking!)
   BT: It turns out that many disks, such as games,...
   BT: have NO   IBM signature...
   BT: Thus, pc-ditto will not boot them...
   BT: We will be providing a field patch shortly...
   BT: to change this checking procedure to...
   BT: checking for the GEMDOS signature, and boot...
   BT: anything else (or to provide an override...
   BT: at the startup time...this was suggested...
   BT: by one of our users...and we listen).ga
??: Ok, batting order, Mowgli, Patrick, Randy, CSM, Ron, then Jim
W.
??: Mowgli.ga
??: In the words of one Steve Tearle..."Whatta GREAT GUY!" thanks!
??: OK thanx. I've got 2 questions:
??: 1) Can you now use PC-Ditto with a monochrome 520ST w/1
single sided drive?
??: 2) How much memory is there in this case when PC-Ditto is
booted?
??: ga.
??: rpc) ?
   BT: 1. No, unfortunately pc-ditto version 2.0 does not support
  Atari mono...
   BT: 2. 384K remains for a 512K system,...
   BT: 703K remains for a 1 Meg and up system.ga
??: OK, any plans for the mono monitor? ga.
   BT: Atari monochrome monitor support will be out this fall.
   BT: We did not release it sooner because it was not
   BT: tested. When we talked to Atari in New York during

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BT: a March show, they recommended going with the color
BT: monitor first because the sales of those monitors
BT: were about 80 percent of U.S. monitor sales. With
BT: limited time and resources, we had to choose between
BT: hard disk support and the mono monitor.
BT: We've even heard from reviewers of some big-name
BT: publications. One said we made the right call.
BT: Everyone in the U.S. screams "color,color,color."
BT: If we had gone the mono route first, most would
BT: say we couldn't do color. But, by doing color
BT: first, most think mono is easy. Oh well.
BT: Good or bad, the issue is moot.
BT: We did place ATARI COLOR MONITOR under the
BT: REQUIREMENTS on the back of the package. We thought
BT: most people would read the package back BEFORE opening
BT: the package. Additionally, we wrote the manual so
BT: that it would not have to be reprinted when the mono
BT: monitor support was released. Today, we still have
BT: people who have not read the package. We will take some
BT: of the blame for not making the notice more
BT: prominent, such as a six-inch banner in red across
BT: the front with fireworks. But, the buyer must share
BT: the blame as well. In life, no matter how we try to
BT: prevent them, we all make mistakes. Sometimes,
BT: collectively.ga
??: Bill, I am certain that there...
??: are a lot more color than Mono systems here in the US...
??: and would guess your decision is well made...
??: but do you have a date for Mono? ga
    BT: You bet. This fall will be our first update...
    BT: free to current registered owners of pc-ditto...
    BT: (by the way I had prepared some canned answers...
    BT: for tonight and couldn't resist using them...
    BT...anyway, back to the ranch)...
    BT: The first update will definitely include Atari mono,...
    BT: midi, mouse, and a few other goodies.ga
??: OK. Well, I hope to see it soon. Thanx Bill. I feel kind of
  persecuted for my mono monitor. ga
??: Thanks, Bill. and you too, Mowgli...
??: Patrick, ga.
??: any disk formatting problems?
??: Patrick, looks like we got only the tail end...
??: of your question, could you repeat it please?ga
??: 2 2 questions: have you tried any hp26 emulators?
??: any disk formatting problems?
??: Bill,ga
    BT: 1. I assume that "emulator" (every child has the same
    name?)...
    BT: means terminal emulator. If so, no. Not yet...
    BT: let me know by message if there is a big need...
    BT: especially with HP3000 systems...
    BT: 2. Do you have any formatting problem(s) in mind...
    BT: or just speculating based on the old rumor...
    BT: that the ST could not format and IBM compatible disk?ga
??: Patrick, ga in response to 2.

??: i had heard t just rumor
??: Ok, they are unfounded...
??: CSM you are up. ga
??: Bill, to follow up my earlier questions. Can you disclose who...
??: will retail pc-ditto in Europe, and just to mention...
??: over here there are 80% mono-systems.
??: 2.
??: Which BIOS'es do you support?.ga
   BT: 1. I don't really know who will do the retail...
   BT: since, we are licensing the entire product, including...
   BT: marketing rights to European firms. My guess is that...
   BT: you will see them at the Hanover Fair, but...
   BT: that's only my guess.
??: Thanx Bill, I'll look out for the PC-D update. Adios.
??: I want it ASAP, not next year!
??: Ok, Ron, You have the floor. ga
   BT: also, for the 80%, I've been told by DR. Archim Becker...
??: Are you ready for some Telecommunication compatibility problems? ga
   BT: that the Europeans buy around 90%. And mono is important...
   BT: (Plus Sept 87 is release date!)...
   BT: (I can't see quest 2, could you repeat?)ga
??: Which BIOS'es do you support?
??: #1 is covered, #2 repeated.ga
   BT: I'm not sure what you mean as BIOS, but...
   BT: we wrote our own BIOS is insure the best compatibility...
   BT: and have received an award for compatibility from PCM, already...
   BT: and we support generic MS-DOS's. In the U.S...
   BT: the DOS's currently are IBM, Compaq. More are on the way. Same for Europe. OK?ga
??: Ok, These series of questions pertain to procomm & Qmodem
??: with Pc ditto
??: First, Qmodem when booted using pc ditto makes the modem output slower then 300 baud when running at 2400 even
??: baud even when I'm at 2400 baud, why does it run so slow, yet the program
??: runs at normal speed, but modem output is too slow to even use..ga
??: Ouch, Bill? ga
   BT: I don't know. We'll have to look into it...
??: are these questions too complicated for tonight?
??: rpc) ?
   BT: What I can anticipate is that the program may loop...
   BT: to provide for a pacing on a standard speed PC...
??: also with procomm, when using the CMD files, pc ditto either locks up and cras
   BT: the pacing may be too much for us.
??: Have you used Procomm with Pc ditto yet? (laugh)
??: ga
   BT: Yes. Version 2.3 and 2.4. The versions changes so often...
   BT: that we're not always able to keep up. (this is being
??: i am using 2.42 the latest since jan 87, and it locks up every time when you
   BT: written on Procomm.)ga
??: Hmm, sounds like this might be good subject for some...
??: Email and messages...

??: try to u/l or d/l or when you try any cmd files.. that needs to be fixed!!!
??: ga
    BT: We'll note the problem, Ron. Thanks.ga
??: also one other thing, oops... when using certain programs is their anyway to
??: make the st think its EGA compatible, or in the next pc ditto?
??: ga
    BT: Not currently, Ron. EGA requires...
??: Bill, ga
??: i guess he didn't have these ready (grin)
    BT: changes in the lowest lever graphics emulation. Plus,...
    BT: if we did provide it, we wouldn't go...
    BT: with an outdated standard. We'd go to VGA...
    BT: and even then, until the requirements for our users...
    BT: is substantially high, we might consider it as a...
    BT: low priority for now.ga
??: hmm, well then do that, it would be nice to see 52 line text on atari monitor
??: ok..thats it for me.. ga Thanx,,bye
??: Ok, thanks Ron and Bill...
??: Will your product run MS-Basic without any problems?ga
    BT: If MS-Basic is the same as the interpreter GW-BASIC (as...
    BT: seen on some systems), then it should...
    BT: If not, then I don't know.ga
??: Jim, that sounds like a no to me...
??: as I know that MS-Basic (Basica?) has some problems...
??: thanks ga
??: on clones.
??: Ok,RPC, you have the floor.
??: Thanks... to visit communications again briefly...
??: 1. Do i understand that ditto CAN maintain a 1200 baud thruput...
??: on at least some packages. If so which... the CT PC emulator had a
??: fit with that until recently too...
??: 2. Is the Atari comm port sync capable and can you address that?
??: 3. Can we run x.pc thru the async port?
    BT: Before I answer, I want to restate an earlier answer...
    BT: IBM's BASICA does not run, and may never...
    BT: BUT, GW-Basic does run. MS-Basic is most likely GW-Basic...
    BT: and thus, I would give it a good chance of running...
    BT: at least I'd try it before buying pc-ditto...
    BT: 1. On many packages, it does. Our Procomm does. (It...
    BT: depends on what protocol you're using, also). I have...
    BT: only seen a handful of serial packages tested...
    BT: (and what is CT PC emulator...I have not heard of it)?...
    BT: 2. Next...
    BT: The Atari port is not sync capable...
    BT: not without additional hardware...
    BT: 3. Unknown... (do you want the ps/2 answer)?ga
??: Yes, I'd like that too...
??: CT is Convergent Tech. Their problem, now solved and probably...
??: same as yours was optimizing so the CPU could keep up with the serial chip.
??: .ga.
    BT: The x.pc for ps/2 does work. Can you get it? I don't know...
    BT: I can say I'm familiar with the Convergent before the layoffs,...
    BT: but on the 020, the problem I know of was a little different...
    BT: and perhaps should not be discussed here.ga
??:SYSOP*Dave) Ok, thanks rpc. Batting order Sheldon, Johnnie, and then John...

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??:thanks. done.ga.
??: SYSOP*Dave) we are into the home stretch... Sheldon, ga
??: Hi, will STSC APL/PLUS run with PC-D? MS WORD?...
??: Also I ordered PC-D but I have a mono mon. How long...
??: till the upgrade?. Thanks. ga
  BT: 1. I haven't seen STSC. (We have a young college fella...
  BT: here who has run an APL, and got pretty far along...
  BT: but, I'm not sure of his final success...
  BT: He's with the JACE -- Jax Atari Comp. Enthusiasts)...
  BT: MS Word up thru 3.1, yes. Mono, update due this fall.ga
??: Bill, are you aware that there really is an incompatibility between...
??: certain old IBM's and ST-formatted disks?
??: ga
  BT: In what ways, John?
??: It's kind of technical, but certain old IBM floppy controllers...
??: cannot read the first sector on standard ST-formatted disks.
  BT: I have several rev.s of IBMs. I have not seen the problem in
  BT: the field, yet. Thanks for the warning. ga
??: Ok...
??: It is 11 pm EDT...
??: and about time to call it an evening...
??: It is only in very old machines with the original rev.
??: of the floppy controller chip. I have one such. ga
??: there are no more questions in que...
??: A morning at 5 AM !
??: but Bill might be willing to stick around informal...
??: and I quess we should accept...
??: ? (informal)
??: Joe and Chris to the formal record...
??: Joe, ga
??: Sorry for coming in so late, had the wrong start time...
??: Before you go away Bill, do you care to give us any...
??: hints as to where you see your emulator going from here...
??: DEWAYNE W) ?
??: In other words, where would you like to see the next...]
??: batch of improvements...ga
??: ga
  BT: one sec, joe...waiting for reply from dave...
  BT: ok, here comes...
??: Jack) (secret prompting!)
  BT: First, we want to get emulation on all Atari configurations...
  BT: (including the Megas?)...
  BT: meaning, using most hardware you owners want used...
  BT: such as mono monitors, drives (hard and floppy...
  BT: like the new 1.4Meg drives from Manzana)...
  BT: midi, mouse, and finally,...
  BT: of course, SPEED IMPROVEMENTS. Without the last,...
  BT: going any further, such as VGA, or 80286 chip set...
  BT: and so on, may be fruitless (and useless)...
  BT: Anyway, we wait to hear from the users as to the future...
  BT: since its your product,...
  BT: we want to produce what you want (when we can, of course)...
  BT: because it then meets your needs, not ours.ga
??: That cover you Joe?
??: I think that sounds like an excellent plan of attack I want to congratulate you on a very

impressive product...

??: I might also mention, in closing, that we are planning...

??: CURRENT NOTES, that is, to start a regular column on...

??: using PC-DITTO in our next issue and will be releasing...

??: a whole line of IBM PD programs on 3.5" format...

??: with the September issue (hopefully with 10 or 12 to start).

??: Great, Joe...

??: Chris has yielded his formal time...

??: so Dewayne, you have the floor for the ??: Ok, I'm a user upgrading from MSDOS world, and compatibility is a must

??: also would like the ability to do MAC Desktop Publish. With Magic Sac

??: and see the st as a low price alternative, question, what system setup, and

??: software is this gonna take, and is there a specific list from the producers

??: listing what software hardware is avail, and where is the best source for thes

??: e products? WHEW

  BT: Great! Glad to have you...

  BT: Ok...

  BT: There is a list, maybe on this system's library,...

  BT: of products tested on pc-ditto (maybe a helpful...

  BT: Sysop can say), or your local dealer can tell you...

  BT: and the software you need, besides pc-ditto is a...

  BT: DOS (we recommend IBM, Compaq). The hardware? I'm not...

  BT: sure of, except most dealers supply Atari peripherals...

  BT: and for things that connect to the serial and parallel ports,...

  BT: normal IBM peripherals will work. Now,...

  BT: if you mean...

  BT: hardware cards, such as IBM boards,...

  BT: well, sadly, the Atari can not use them. pc- ditto is...

  BT: totally software based. Therefore, there are no slots...